

MetroWest*

Portishead Branch Line (MetroWest Phase 1)

TR040011

Applicant: North Somerset District Council

8.1 - Design and Access Statement

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, regulation 5(2)(q)

Planning Act 2008
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Design and Access Statement

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Part 1 Introduction

1. Project Background 2. Purpose of this

- 1.1 The Portishead Branch Line DCO scheme comprises the Nationally Significant Infrastructure Project ("NSIP") and its associated development. The reconstruction of the disused section of the railway line between Portishead and Pill falls within the definition of a NSIP.
- 1.2 Other works required for the DCO Scheme, such as the works to the highway at Portishead and the alterations to the railway between Pill and Ashton Junction are Associated Development as defined by Section 114 of the Planning Act 2008.

document

- 2.1 This Design and Access Statement (DAS) has been produced in support of North Somerset District Council's (NSDC) application for Development Consent for the Portishead Branch Line DCO scheme. It describes the wider context. background, opportunities and constraints and how these factors were considered in developing the DCO Scheme. The DAS also describes the main alternatives to the proposals that were considered, in the context of an existing railway line who's location is fixed, how the design of the DCO Scheme has evolved in response to public and stakeholder consultation, and presents the illustrative design.
- 2.2 This document primarily focuses on the design of the DCO Scheme. The DAS highlights the principles of design applied throughout the design process in order to ensure that the resulting design is robust, attractive and flexible.

3. The Development **Consent Order** (DCO)

3.1 The project may only be authorised by means of a Development Consent Order (DCO) made by the Secretary of State under the Planning Act 2008. A DCO is the means of obtaining the necessary powers and permission for developments categorised as NSIP's.

4. Structure of the DAS

4.1 This document has been structured primarily around the design of Portishead and Pill stations, as well as access points along the Portishead Branch Line DCO scheme from Portishead to Ashton. The route of the railway is fixed in that it utilises the existing railway corridor, as such these are the only designed elements of the DCO Scheme and therefore form the basis of this DAS.

Part 1 Introduction

This section contains an executive summary, background to the DCO Scheme, the purpose of the DAS, strategic position and scheme context in terms of planning policy and baseline analysis.

Part 2 Approach and Principles

Sets out the way in which the DCO scheme will be integrated into the wider railway and transport network, project wide design principles, sustainability, environment, landscape character and heritage.

Part 3 Consultation Engagement and design development

Sets out the design process that has been followed, and the various rounds of consultation and stakeholder engagement that have been undertaken, demonstrating how these have informed the evolution of the design.

Part 4 Portishead Railway Station

Sets out the context, opportunities and constraints, access and egress, wider connectivity, design evolution / alternatives that have guided the design of the station. This section also describes how functional components of the DCO Scheme have been integrated into the setting of the station as well as design features and an indication of the proposed materials.

Part 5 Pill Railway Station

Sets out the context, opportunities and constraints, access and egress, wider connectivity, design evolution / alternatives and design principles that have guided the design of the station. This section also describes how functional components of the DCO Scheme have been integrated into the setting of the station as well as design features and an indication of the proposed materials.

Part 6 Access Works

Sets out the locations of access points along the line along with a short statement on the design.

Part 7 Other Works

Sets out the locations of other works along the line along with a short statement on the design.

5. Executive Summary

- 5.1 This Design and Access Statement (DAS) is one of the supporting documents submitted as part of the application for Development Consent for the Portishead Branch Line DCO Scheme.
- 5.2 The primary aim for the DCO scheme is to provide an hourly / hourly plus service for passenger trains operating between Portishead and Bristol Temple Meads, calling at Pill, Parson Street, and Bedminster. This provides up to 20 passenger trains in each direction per day (Monday to Saturday), with approximately 10 passenger trains in each direction on Sundays.
- 5.3 A full description of the DCO Scheme can be found within Chapter 4 of the Environmental Statement. A summary is included in the following pages.

The Nationally Significant Infrastructure Project (NSIP) works

5.4 In summary, the NSIP works include a new permanent railway approximately 5.5km long from the junction of Quays Avenue and Harbour Road in Portishead to meet the existing Portbury Dock railway to the east of the M5 Motorway, then running parallel to the existing freight line to a new junction with the existing operational railway line between Pill Viaduct and the western portal of Pill Tunnel.

Associated Works

- 5.5 In summary, as illustrated on Figure 1, the associated development works include horizontal and vertical adjustments to the alignment of the permanent way between Pill and Ashton Junction within Network Rail's existing railway boundary.
- 5.6 The following pages illustrate the location of key elements that contribute to the DCO Scheme.
- 5.7 In addition to the works listed on the following pages, the following Public Rights of Way (PROW) changes are proposed as part of the works.
- Improvement to bridleway LA15/21/20 (work no. 14);
- Improvement to bridleway LA8/66/10 at its junction with Royal Portbury Dock Road (work no. 14A);
- Realignment of the existing permissive cycling route passing under the highway of Marsh Lane (work no. 16);
- A new bridleway passing east under the M5 and turning south to join National Cycle Route 41 and the permissive path between the Avonmouth Bridge and Pill (work no. 18); and
- Temporary diversion of part of NCN 41 north from its existing alignment north of the Portishead Branch Line, West of Avon Road, Pill (work no. 20).
- 5.8 The purpose of this DAS is to set out the illustrative design for the permanent spaces, stations, and access points along the DCO Scheme. It does not set out the justification for the route of the DCO

- scheme as it utilises the existing railway corridor. There are no realistic options for alternative routes for the railway outside the existing railway corridor, which in any event is safeguarded in NSDC's Local Plan.
- 5.9 Specific project objectives were identified to address the transport problems currently experienced, and also draw from the National Policy Statement for National Networks.
- 5.10 The principal objectives of MetroWest Phase 1 are as follows.
- To support economic growth, through enhancing the transport links to the Temple Quarter Enterprise Zone ("TQEZ") and into and across Bristol City Centre, from the Portishead, Bath and Avonmouth / Severn Beach arterial corridors.
- To deliver a more resilient transport offer, providing more attractive and guaranteed journey times for commuters, business and residents into and across Bristol, through better utilisation of strategic heavy rail corridors from Portishead, Bath and Avonmouth / Severn Beach.
- To improve accessibility to the rail network with new and re-opened rail stations and reduce the cost of travel for commuters, business and residents.
- To make a positive contribution to social well-being, life opportunities and improving quality of life, across the three arterial corridors, Portishead, Bath and Avonmouth / Severn Beach.

- 5.11 In addition, MetroWest Phase 1 has the following supporting objectives:
- To contribute to reducing road based traffic congestion on the Portishead, Bath and Avonmouth / Severn Beach arterial corridors.
- To contribute to enhancing the capacity of the local rail network, in terms of seats per hour in the morning and afternoon peaks.
- To contribute to reducing the overall environmental impact of the transport network.

Works Along the Route

- 5.12 A full description of works included in the DCO scheme can be found in Chapter 4, Description of the Proposed Works, within the Portishead Branch Line DCO scheme Environmental Statement (ES). The text below sets out the main aspects of the works in general.
- 5.13 Figure 1 (Summary of Works Required for MetroWest Phase 1DCO Scheme) illustrates the section of the scheme that qualifies as a NSIP.

North Somerset

Portishead to Pill railway line

5.14 The disused railway will be rebuilt and realigned to accommodate the 75 mph design line speed and gauging through the existing overbridges.

Portishead Station and surrounds (A)

- 5.15 New railway station, car parking (254 spaces plus 19 disabled bays), highway modifications (Quays Avenue, Phoenix Way, Harbour Road) and public realm. New combined pedestrian and cycle link towards the town centre.
- 5.16 A new railway station comprising a platform, shelter, office and waiting area, refuse area and railway communications mast, to the south of Phoenix Way and east of the realigned Quays Avenue, Portishead.
- 5.17 The platform is to be approximately 130 m long which is sufficient to provide active provision for a five car train. CCTV, public announcement speakers and information screens will also be located on the platform. The platform will be lit by luminaires on lighting columns along the platform.
- 5.18 A new foot and cycle path at the following locations:
 - South to Galingale Way, Portishead;
 - North to Tansy Lane, Portishead;
 - Phoenix Way;
 - Quays Avenue;

Trinity Primary School Bridge (B)

5.19 New combined pedestrian and cycle over-bridge to link residential areas on the south and north sides of the railway as well as Trinity Primary School on the north side of the railway.

Permanent Access off Sheepway (C)

- 5.20 A temporary construction haul road at Sheepway. A new permanent vehicular compound and road/rail vehicle access point at Sheepway.
- 5.21 Temporary and permanent diversion of the existing permissive cycle path on the north-west side of Sheepway, opposite Shipway Gate Farm, Portbury.

New Access at Portbury Hundred A369 (D)

- 5.22 A temporary construction compound to the north of the A369 Portbury Hundred.
- 5.23 A new access for agricultural purposes will be provided on the A369 Portbury Hundred to the west of Station Road, Portbury to replace the access to those fields currently reached from Sheepway across the railway formation.
- 5.24 A new vehicular access for permanent maintenance proposes will be provided at the Wessex Water pumping station located off the A369 Portbury Hundred at The Drove.

Public Rights of Way south of Portbury Dock

5.25 The existing public bridleway (LA8/66/10 and LA15/21/20) that runs between the railway and the Port fence will be enhanced at the crossing at Royal Portbury Dock Road. The related permissive cycle route path under Royal Portbury Dock Road, which is permitted by license

by Network Rail, will be realigned to allow both the permissive route and railway to pass under Royal Portbury Dock Road.

5.26 Similar alterations to the alignment of National Cycle Route 26 are proposed at the Marsh Lane and the M5 over-bridges.

Minor Works to Bridges and Culverts along the Disused Railway

5.27 It is likely that minor remedial works will be required for some or all of the over-bridges, namely Sheepway, Station Road, Royal Portbury Dock Road and Marsh Lane. These are likely to be minor works to bridge parapets to enhance safety measures. The remaining bridges and culverts along the disused railway will remain with strenghtening works or minor repairs or, replaced if no longer structurally sound.

Lodway Farm / Lodway Close

5.28 Creation of a temporary construction compound at Lodway Farm, Pill together with a haul road for works to provide for embankment widening and stabilisation.

Avon Road Bridge, Pill

5.29 To the west of Pill station the existing rail bridge over the Avon Road / Lodway Close pedestrian and cycle underpass will be replaced with a new wider bridge to support the double track section (one track for the freight train, the other for passengers to Portishead).

5.30 Temporary construction compound proposed.

Pill Car Park (E)

- 5.31 The former goods yard off Monmouth Road, is to be used as a temporary construction compound and then transformed into the main station car park, providing 58 spaces, with 3 disabled bays provided at the station forecourt.
- 5.32 The site will also have a permanent compound for network rail including a road rail access point and a Principal Supply Point.

Pill Station (F)

- 5.33 North Somerset District Council has purchased No. 7 Station Road. This property will be demolished and initially the site will be used as a small construction compound before being converted into the station forecourt.
- 5.34 The station forecourt will include three disabled parking spaces and a car passenger drop off area. A shelter by the entrance will house a ticket machine, waiting area, seating and cycle parking for about 20 bicycles. Vehicular access into and out of the new station forecourt will be one-way, with the entrance off Sambourne Lane and the exit onto Station Road.
- 5.35 A new pedestrian ramp will be constructed from the site of the new station forecourt to the platform.
- 5.36 The new platform will be approximately 126 m long to provide active provision for a five car train. A small shelter will be provided on the platform in front of the pedestrian ramp.

5.37 Lighting will consist of lighting columns and by illuminated bollards in the emergency refuge area. CCTV and public announcement speakers will also be provided on the platform.

Pill Memorial Club bus stop works (G)

5.38 Adjustment of the highway around the Pill Memorial Club Bus Stop to improve safer passage across the road by improving visibility and provide more space for an improved bus stop.

Pill Viaduct (H)

- 5.39 A small temporary compound is proposed under the viaduct, between Star Lane and Pill Library.
- 5.40 Embankment strengthening works on the east side of Pill Viaduct to the rear of property off Mount Pleasant.
- 5.41 New Pill Junction between Pill Viaduct and the western portal of Pill tunnel where the existing and new railway tracks combine to the single track.

Pill Tunnel Eastern Portal (I)

5.42 A permanent new (vehicular) access is proposed from the highway at Chapel Pill Lane, Ham Green North of the eastern portal of Pill Tunnel.

Bristol

Clanage Road (J) Bristol

5.43 A new permanent maintenance vehicular compound and track access point with hard standing will be required with access off Clanage Road. A replacement access from land to the north of the Bedminster Cricket Ground to Clanage Road.

Ashton Road A370 (K) Bristol

- 5.44 Public foot and cycle ramp from the A370 Ashton Road to Ashton Vale Road to the west of the Portishead Branch Line Railway.
- 5.45 Improvement of the highway of Winterstoke Road at its junction with Ashton Vale Road.

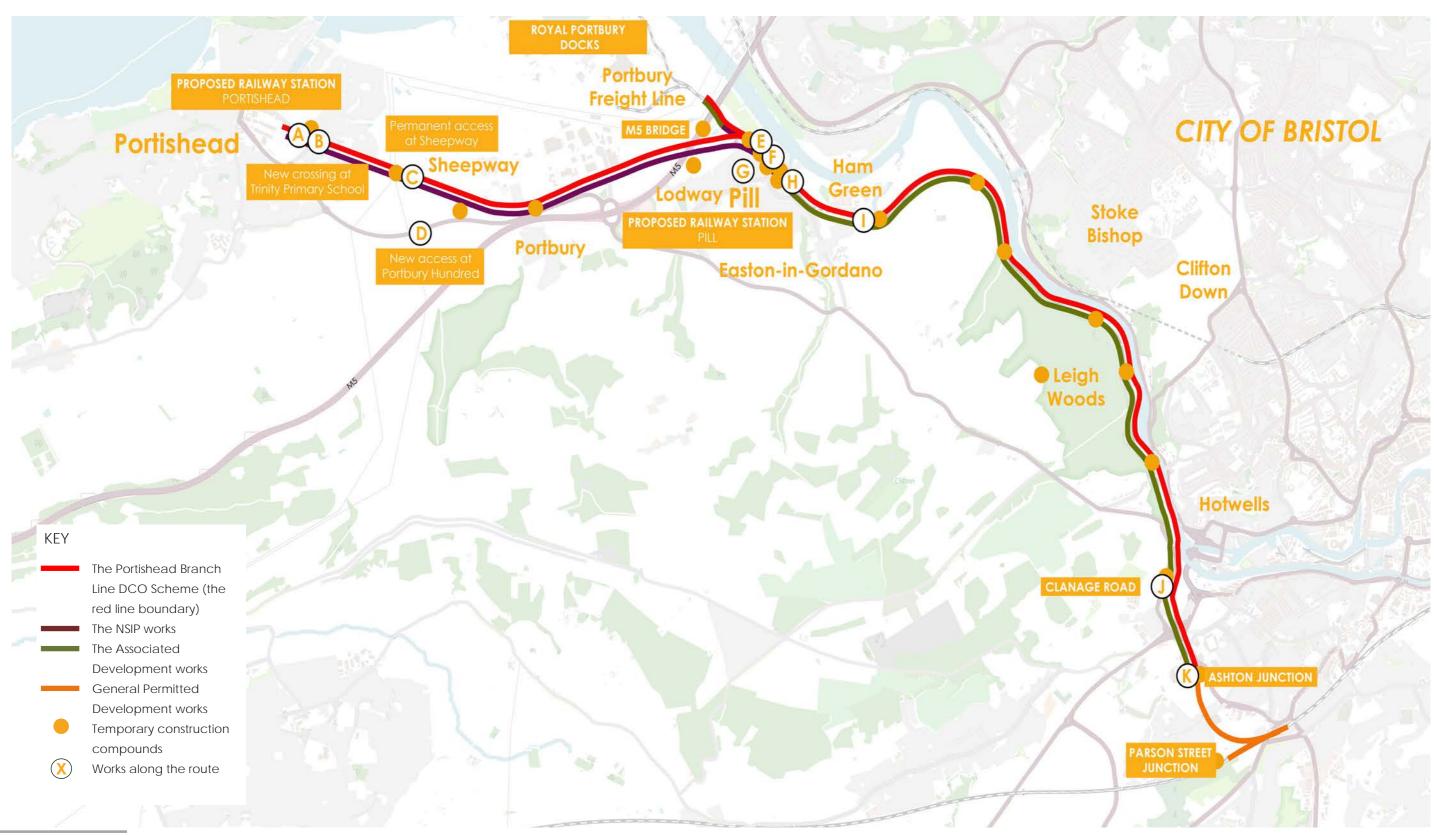


FIGURE 1: Summary of Works Required for Portishead Branch Line DCO Scheme

6. MetroWest

- 6.1 The DCO scheme is part of a wider programme promoted by the four local authorities of North Somerset ("NSDC"), City of Bristol ("BCC"), Bath and North East Somerset ("B&NES"), South Gloucestershire ("SGDC") and the West of England Combined Authority ("WECA").
- 6.2 Figure 2 depicts the connectivity and physical relationship between the proposed DCO works and the wider MetroWest programme.
- 6.3 The West of England councils are working together to promote schemes to deliver investment up to £200 million in improvements to the local rail network over the next ten years. The proposals together comprise the MetroWest Programme.
- 6.4 The West of England Councils are working with Network Rail, Great Western Railways and the freight train operators to deliver the MetroWest Programme.
- 6.5 The MetroWest Programme comprises:
- MetroWest Phase 1,
- MetroWest Phase 2,
- A range of station re-opening and new station projects, and
- Smaller scale enhancement projects for the West of England local rail network.

- 6.6 The MetroWest Phase 1 project comprises the delivery of infrastructure and passenger train operations to provide:
- A half hourly service for the Severn Beach line (hourly for St. Andrews Road station and Severn Beach station);
- A half hourly service for Keynsham and Oldfield Park stations on the Bath Spa to Bristol line; and
- An hourly service (or an hourly service plus) for a reopened Portishead Branch Line DCO scheme with stations at Portishead and Pill.
- 6.7 MetroWest Phase 1 is being led by NSDC and WECA on behalf of the five West of England Authorities, as a third party promoted rail project, funded by the authorities, the West of England Local Enterprise Partnership ("WofE LEP") and DFT
- 6.8 MetroWest Phase 2 comprises delivery of infrastructure and passenger train operations to provide a half-hourly service for the Yate to Bristol line and enhancement of the existing Henbury Freight Line to provide an hourly service from Henbury to Bristol Temple Meads, with new stations at Henbury, North Filton, and Ashley Down.
- 6.9 MetroWest Phase 2 is being led by South Gloucestershire District Council and WECA on behalf of the five West of England Authorities as a third party promoted rail project, funded by the Authorities and the WofE LEP.

- 6.10 The area is home to a growing population in general, increasing the potential market catchment for any transport infrastructure.
- 6.11 In general, there is forecasted to be a significant number of jobs created in the construction and supply of the new service, a large increase in accessibility and connectivity including the new railway service (Portishead to Bristol Temple Meads).

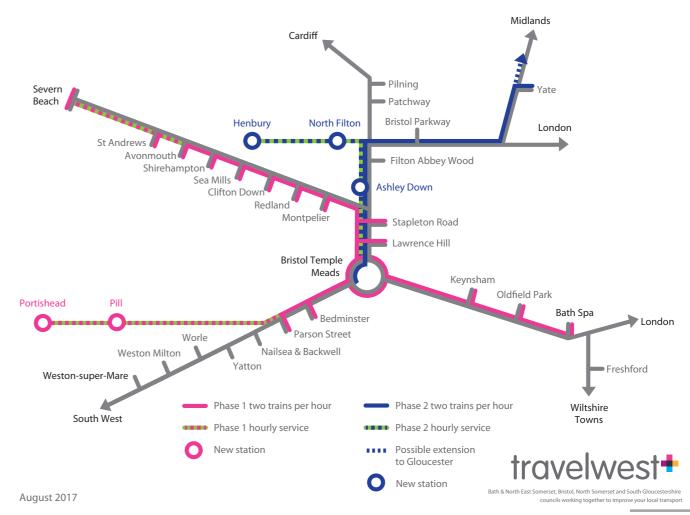
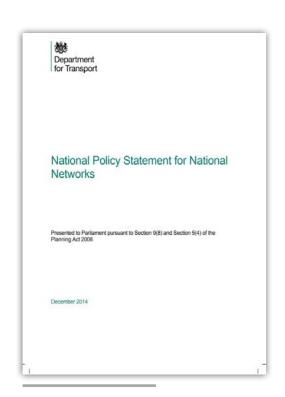


FIGURE 2: MetroWest Phases 1 and 2

7. Planning Background

- 7.1 An appraisal of the DCO Scheme's compliance with planning policy is presented in the Planning Statement accompanying the DCO Application. Primary consideration has been given to the provisions of the NPSNN, dated December 2014.
- 7.2 Material considerations include the National Planning Policy Framework ("NPPF") and the development plans for the two host Local Planning Authorities, NSDC and BCC.



National Planning Policy and Nationally Significant Infrastructure Projects

Nationally Significant Infrastructure Projects

- 7.3 For a project to qualify as a Nationally Significant Infrastructure Project it must meet certain thresholds as described in Amendments to section 25 of the Planning Act 2008:
- "New railway lines in England which are to be operated by Network Rail that (when constructed) ...is a continuous length of more than 2 kilometers... (and) is not on land that was operational land of a railway undertaker immediately before the construction work began or is on land that was acquired at an earlier date for the purpose of constructing the railway."

National Policy Statement for National Networks (December 2014)

- 7.4 The National Policy Statement for National Networks (NPSNN) provides planning guidance for promoters of Nationally Significant Infrastructure Projects on the road and rail networks, and is the basis for the examination by the Examining Authority and decisions by the Secretary of State. This is the main document that the DCO Scheme will be assessed against.
- 7.5 The Government's vision and strategic objectives for the national networks are described in the Summary of Need in Chapter 2 of the NSPNN as follows:
- "The Government will deliver national networks that meet the country's long-term needs; supporting a prosperous and competitive economy and improving overall quality of life, as part of a wider transport system. This means:
- Networks with the capacity, connectivity and resilience to support national and local economic activity and facilitate growth and create jobs;
- Networks which support and improve journey quality, reliability and safety.
- Networks which support the delivery of environmental goals and the move to a low carbon economy.
- Networks which join up our communities and link effectively to each other." (page 9)

- 7.6 The NSPNN identifies that travel demand for road and rail is expected to increase in the foreseeable future with economic and population growth (paragraph 2.4). Without action, this growth will in turn lead to increased congestion and crowding, safety issues and a decrease in the rate of economic growth and quality of life (paragraph 2.9).
- 7.7 Transportation networks can unlock regional economic growth and regeneration, by improving connectivity and performance, particularly in disadvantaged areas (paragraph 2.6), which is a key driver behind the delivery of the DCO scheme.
- 7.8 The planning statement accompanying the Portishead Branch Line DCO scheme ES, (Volume 2, 2019) covers compliance of key topics within the NPSNN including, but not limited to:
- "Offer a safe and reliable route to work:
- Facilitate increases in both business and leisure travel;
- Support regional and local public transport to connect communities with public services, with workplaces and with each other; and
- Provide for the transport of freight across the country, and to and from ports, in order to help meet environmental goals and improve quality of life."
- 7.9 The DCO Scheme seeks to address the future predicted passenger demand on the rail network, whilst providing a viable, efficient and affordable alternative to the road network. It is anticipated

that the DCO Scheme will help to encourage a modal shift away from private car journeys, helping to facilitate a reduction in growth of congestion on the road network, freeing up capacity and reducing carbon emissions. The overall vision for the DCO Scheme is included above within the project objectives.

7.10 Paragraph 3.3 states:

"Applicants should also provide evidence that they have considered reasonable opportunities to deliver environmental and social benefits as part of schemes."

- 7.11 Policies of relevance to the DCO Scheme are included in the relevant chapters of the Portishead Branch Line DCO scheme Environmental Statement (Volume 2) as well as the DCO Scheme's compliance, topics covered include:
- Planning Framework;
- Air Quality;
- Cultural Heritage;
- Ecology;
- Geology;
- Landscape and Visual Impacts;
- Materials and Waste;
- Noise and vibration;
- Socioeconomics:
- Soils:
- Transport; and
- Water.

National Planning Policy Framework (2019)

- 7.12 The revised NPPF, published by the Ministry of Housing, Communities and Local Government in February 2019, sets out Government planning policies for England to achieve sustainable development and details how the policies are expected to be applied.
- 7.13 The overarching aim of the NPPF is the achievement of sustainable development, with the planning system expected to contribute to this goal. Within this context, the NPPF places emphasis on contributing to a strong economy by ensuring that development supports growth and innovation, creating a high quality built environment that supports strong, vibrant and healthy communities, and development that protects and enhances the natural, built and historic environment.
- 7.14 The Chapter's following paragraphs summarise the relevant provisions of the NPPF, whilst further detailed consideration is provided within the Planning Statement and is reflected in the corresponding sections of the Environmental Statement.

- Section 6: "Building a strong, competitive economy";
- Section 8: "Promoting healthy and safe communities";
- Section 9: "Promoting sustainable transport";
- Section 12: "Achieving welldesigned places";
- Section 13: "Protecting Green Belt land";
- Section 14: "Meeting the challenge of climate change, flooding and coastal change";
- Section 15: "Conserving and enhancing the natural environment"; and
- Section 16: "Conserving and enhancing the historic environment".

National Planning Practice Guidance (March 2014)

7.15 On 6 March 2014 the Department for Communities and Local Government (DCLG) launched the National Planning Practice Guidance ("NPPG") as a webbased resource to provide practical planning guidance on a range of categories covering issues such as the green belt, flood risk, housing and employment, transport and infrastructure, along with guidance to assist with the preparation of local plans, determining planning applications, and Environmental Impact Assessment. This guidance recognises the importance of local infrastructure planning in the development of sustainable communities.

Regional Planning Policy

West of England Joint Spatial Plan

7.16 A joint spatial plan has been prepared by NSDC, BCC, B&NES and SGC ("JSP"), which will provide a strategic planning framework for the West of England. Currently in the examination stage, the plan will be used to inform local plan reviews and set out objectives for the overall quantum of housing and jobs to be delivered within the West of England, including their distribution across the sub-region, the overall spatial strategy, strategic priorities, and strategic infrastructure necessary to support the delivery of the strategy.

7.17 The JSP establishes a vision and four strategic priorities which seek to deliver a more integrated and reliable transport network, to support sustainable economic growth and healthy and sustainable lifestyles for all communities, whilst addressing a series of critical issues:

"The form and function of development in some parts of the West of England has resulted in significant pressure on infrastructure and settlement patterns which are over-reliant on the private car. This inhibits wealth creation and productivity and contributes to climate change and poor health."

7.18 The outcome of the Strategic Priorities and Policy framework is to address these critical issues and deliver

- "Sustainable growth of homes and jobs, supported by necessary infrastructure.
- Reduction in car dependency and improved public transport access to opportunity, jobs and services.
- Contribution to mitigating impacts of climate change.
- Delivery of Communities in which people want to live and work
- Improved health and wellbeing outcomes."

7.19 The Joint Transport Study ("JTS") builds on the provisions within the JSP and sets out a transport vision for the West of England, which reflects the existing and future challenges on the transport network. It reflects on recent and planned improvements to both the strategic road network and the rail network, including proposals for the redevelopment of Bristol Temple Meads station.

7.20 In particular, it identifies that there is a clear programme of investment for further schemes including MetroWest and MetroBus, which aim to provide stronger links to the West of England's priority development sites within the Enterprise Zone and Enterprise Areas.

Development plans for the two host Local Planning Authorities, NSDC and BCC

- 7.21 The local planning framework comprises a number of key adopted documents which form the statutory development plan for each authority, against which proposals seeking planning permission are assessed.
- 7.22 Whilst emerging plans and the policies and proposals contained within them do not form part of the development plan until adopted, depending on the stage at which such documents have reached in the plan preparation process, they may be held as material considerations in the determination of applications for development.
- 7.23 MetroWest Phase 1 affects all four West of England Authorities whist the DCO Scheme lies within the jurisdiction of two of the local planning authorities, NSDC and BCC. The following subsections summarise the local planning framework for these two local authorities, whilst a more detailed policy appraisal can be found in **Appendix 1**.

Draft Joint Local Transport Plan 4 2019-2036 (January 2019)

- 7.24 The draft Joint Local Transport Plan (JLTP) has been prepared by WECA and the four West of England local authorities (B&NES, BCC, NSC, and SGC). It takes account of the JSP and JTS findings and recommendations and will support delivery of the more detailed interventions set out in local transport strategies across the region.
- 7.25 This includes the Bath and Bristol Transport Strategies, and other supporting strategies for cycling, parking and other modes.
- 7.26 JLTP4 will also be supported by other regional strategies covering cycling, walking, buses and the main road network (Key Route Network).
- 7.27 The JLTP is fundamental in supporting the West of England Energy Strategy, along with local clean air strategies, as part of achieving carbon reduction.
- 7.28 The JSP will mainly be delivered by the Local Plans and SPDs, which include parking standards for the public highway and new development, including housing and offices.
- 7.29 Both WECA and the local authorities will put together their capital programmes for major scheme delivery.

North Somerset District Council Development Plan

7.30 Of the plans available, policies within the Core Strategy, the policies within the Sites and Policies Plan Part 1: Development Management Policies and Part 2: Site Allocations Plan are considered to be of particular relevance to the DCO Scheme. These have been used to guide the DCO Scheme and are included in more detail in Chapter 6 of the Environmental Statement that accompanies the application.

- 7.31 The statutory development plan for North Somerset comprises the following documents:
- North Somerset Council Core Strategy (Adopted January 2017);
- Sites and Policies Plan Part 1: Development Management Policies (Adopted July 2016);
- Long Ashton Neighbourhood Development Plan 2013 – 2033 (Adopted May 2015); and
- West of England Joint Waste Core Strategy (Adopted 2011).

North Somerset Council Core Strategy (April 2017)

7.32 The Core Strategy sets out the broad long-term vision, objectives and strategic planning policies for North Somerset up to 2026. The Core Strategy was adopted in January 2017.

7.33 Those policies of particular relevance to the DCO Scheme are shown in Table 6.1 of the Environmental Statement (2019) and included in **Appendix 1** of this document. An assessment of the DCO Scheme's compliance with these policies is provided in Appendix 1 of the Planning Statement.

Sites and Policies Plan Part 1: Development Management Policies (July 2016)

7.34 The development management policies are generic policies that are used when assessing a range of planning applications and development proposals. The document does not contain site allocations, which are detailed in Part 2, but instead focuses on a broad range of development issues such as the Green Belt, major transport schemes, development in the countryside and retailing.

7.35 A summary of adopted policy in the Sites and Policies Plan Part 1: Development Management Policies has been included in **Appendix 2**.

Sites and Policies Plan Part 2: Site Allocations Plan (April 2018)

7.36 The adopted Sites and Policies Plan now replaces the saved polices from the Replacement Local Plan

7.37 Identifies detailed allocations required to meet the development aspirations of the Core Strategy including the review of existing sites and identification of new sites and designations, along with safeguards for local green space, strategic gaps, or other protective designations, although it does not include any allocations relating to transport infrastructure.

Supplementary Planning documents

- Creating Sustainable Buildings and Places SPD (March 2015);
- Parking Standards SPD (November 2013);
- Travel Plans SPD (November 2010);
- Biodiversity and Trees SPD (December 2005);
- Landscape Character Assessment SPD (September 2018); and
- North Somerset and Mendip Bats Special Area of Conservation (SAC) Guidance on Development: Supplementary Planning Document (January 2018);

Other Planning Guidance

7.38 Forest of Avon – A Guide for Developers (October 2005): This SPD has its basis in replacement local plan policy relating to new developments in the Forest of Avon and the requirement for new tree planting.
7.39 Emerging Neighbourhood Development Plans ("NDP")

- Portbury NDP: NSDC approved an application from Portbury Parish Council to designate Portbury as a neighbourhood area. A future NDP is intended to be prepared for this area.
- Pill/Easton-in-Gordano and Abbots Leigh NDP: NSDC approved a joint application from Pill/Eastonin-Gordano and Abbots Leigh Parish Councils to designate the two parishes as a combined neighbourhood area. A future NDP is intended to be prepared for this area.

The North Somerset Replacement Local Plan (now superseded) 2007

7.40 The North Somerset
Replacement Local Plan was
adopted in 2007 primarily to "develop
the policies and general proposals
of the Structure Plan for the period to
2011 and relate them to precise areas
of land where appropriate".

7.41 Whilst all policies contained within the replacement local plan have now been superseded by the adopted Sites and Policies plan, there are historic policies that directly relate to the scheme which are included on these pages for reference.

Historic Policy Within The Replacement Local Plan Relating to the DCO Scheme

7.42 Policy T/3 – Proposed railway stations (now superseded) emphasized the importance of a new station at Portishead:

"The importance of the station as a principal gateway to the town – forming first impressions – should not be under-estimated. The character, quality and local distinctiveness of the town needs to be reflected in the design of the station and it's approaches."

7.43 Policy T/10 (now superseded) of the RLP states:

"Development giving rise to a significant number of travel movements will only be permitted if it: i) is not likely to lead to an unacceptable degree of traffic congestion or generate traffic that cannot be accommodated without seriously affecting the character of the surrounding area and can readily be integrated with public transport, cycleway and footpath links and bridleways where appropriate."

Bristol City Council

7.44 The statutory development plan for BCC is the Bristol Local Plan comprising the following suite of documents, which are used alongside the NPPF to guide development in the city:

- Bristol Core Strategy (Adopted June 2011);
- Site Allocations and Development Management Policies (Adopted July 2014);
- Bristol Central Area Plan (Adopted March 2015); and
- West of England Joint Waste Core Strategy (Adopted March 2011).

7.45 The policies within the Core Strategy, Site Allocations and Development Management Policies are considered to be of particular relevance to the DCO Scheme.

Bristol Core Strategy (June 2011)

7.46 The Core Strategy sets the Spatial Vision and Strategic Objectives for Bristol up to 2026, identifying the future development intentions and strategy for the city and its neighbourhoods. It provides a Delivery Strategy which identifies the means of delivering the vision and objectives and includes a spatial strategy which contains the Council's strategic policies for different parts of the city.

7.47 Those policies within the Bristol City Council Core Strategy of particular relevance to the DCO Scheme are shown in the Environmental Statement and included in **Appendix 4**. An assessment of the DCO Scheme's compliance with these policies are provided in Appendix 1 of the Planning Statement.

Bristol Site Allocations and Development Management Policies (July 2014)

7.48 To support the delivery of the Core Strategy, the Site Allocations and Development Management Policies incorporate development management policies, designations and site allocations that will deliver the strategic policies and principles of the Core Strategy.

7.49 Those policies within the Site Allocations and Development Management Policies of particular relevance to the DCO Scheme are shown in **Appendix 3**.

Supplementary Planning Guidance

7.50 BCC supplementary planning guidance that is relevant to the DCO Scheme includes:

- Planning Obligations SPD (September 2012); and
- PAN 2 Conservation Area Enhancement Statements (November 1993).

7.51 Other Relevant Strategies and Plans are included in Chapter 6 of the Environmental Statement.

8. DCO Scheme Context

8.1 The following section briefly defines the historic character of the study area surrounding the DCO Scheme.

Geology / Landscape Character

8.2 The most important area of geology that the DCO Scheme runs through is the Avon Gorge which affords one of the best opportunities for people to study the Carboniferous rocks in Britain.

"The Gorge has natural cliffs and quarry exposures of Carboniferous limestone, which are of great geological interest..." (10.4.8)

Historic Land Use

- 8.3 According to NSC's Historic Landscape Characterisation study, found within the council's interactive planning map, the Portbury Freight Line passes through or abuts several Historic Character Areas.
- 8.4 The railway corridor has its own assigned landscape character unit: Historic Landscape Characterisation 28, which is defined as a 'Large Scale Utility Landscape'. This refers generally to areas of transport infrastructure dating from the post-medieval and modern periods related primarily to the industrial expansion of the country in the same periods.

Location	Historic Character
Ashton Gate	Medieval enclosure
Leigh Woods	Pre 1800 ancient woodland
Ashton Court / Leigh Court	Registered Parks and Gardens (Post medieval designated ornamental landscapes)
Ham Green	Mainly C20th settlement with C19th infill to the east, south and west. Further east and west post medieval parliamentary enclosure, medieval enclosed fields and 18th - 19th century enclosure surround Ham Green.
Pill	Core settlement surrounded by C20th development, enclosed by Ham Green to the east and late medieval enclosed open fields with some post medieval organised enclosure of anciently reclaimed inland moors.
M5, J19	Network of post medieval C15th - C17th organized enclosure of anciently reclaimed, inland moors and large scale utility landscape.
Sheepway	Late medieval enclosed open fields surrounding core settlements
Portishead	Large scale utility landscape with a mixture of C20th settlement, post medieval organised enclosure of anciently reclaimed inland moors and post medieval (C18th - C19th) parliamentary enclosure or reclamation of inland peat moors and common.

TABLE 1: Summary of historic Character



FIGURE 3: A train crosses the Pill Viaduct in 1960. This is a service from Portishead, which has just left Pill. Source: John Thorn, CC BY-SA 2.0, https://commons.wikimedia.org/w/index.php?curid=6735889



FIGURE 4: Portishead station in 1954. It closed ten years later. Source: English Heritage

Historic Assets

8.5 This is covered in more detail in Chapter 8 of the Environmental Statement. Few historic railway assets survive, other than bridges.

High Value Historic Assets

8.6 There a variety of historic assets near and within the wider context of the DCO Scheme. Assets with intervisibility with the DCO Scheme have been included below.

Listed Buildings

- Clifton Suspension Bridge (Grade I);
- Clifton Observatory (Grade II*);
- Nos. 308 and 309 Hotwell Road, Freeland Court, limited visibility (Grade II* listed);
- The Paragon Nos. 1 to 14 and 15 (Grade II* listed); and
- The swing bridge on Brunel's north and south lock (Grade II* listed);

Scheduled Monuments

- Clifton Down Camp scheduled monument;
- Conygar Hill scheduled monument (wooded feature) – limited visibility; and
- Abonae on the east side of the River Avon – limited visibility.

Conservation Areas

• Hotwells and Clifton Conservation Area.

Registered Parks and Gardens

- Ashton Court Grade II Registered Park and Garden; and
- Leigh Court Grade II Registered Park and Garden.

8.7 The DCO scheme passes

Landscape Character

through a variety of landscape character areas and these are described in more detail within Chapter 11 of the Environmental Statement. The route of the DCO Scheme passes through two national character areas, NCA 106 Severn and Avon Vales, characterized by a combination of the lower valleys of the rivers Severn and Avon and industrial development and NCA 118 Bristol, Avon Valleys and Ridges, characterised by alternating ridges, and broad valleys, with some steep, wooded slopes and open rolling farmland.

8.8 North Somerset Landscape
Character Assessment 2018 further
subdivides these areas into 11
Landscape Character Types, which
are further subdivided into Landscape
Character Areas. In addition to
this, a further site specific character
assessment was undertaken as part
of the Landscape and Visual Impact
Assessment which forms part of the
Environmental Statement and further
defines the character of the areas the
DCO Scheme passed through.

North Somerset Landscape Character Assessment (2018)

- A2: Clapton Moor;
- C2: Portbury Settled Coastal Edge;
- J6: Avon Rolling Valley Farmland;
- D1: Avon Gorge;
- G2: Failand Settled Limestone Plataue; and
- E5: Tickenham Ridges and Combes.

Site specific character areas

- Sea Mills High Landscape Character Value; and
- Avon Gorge High Landscape Character Value.

Ecological Designations

8.9 There are a variety of designations in close proximity or near to the DCO scheme. The following designations are considered to be the most prominent.

International Protected Areas

8.10 These include Special Protection Areas (SPA), Special Areas of Conservation (SAC) & Ramsar Sites such as the Severn Estuary. The Avon Gorge Woodlands SAC runs along the boundary of the Avon Gorge.

Nationally Significant Designations

8.11 Nationally important ecological assets of relevance to the DCO Scheme include Avon Gorge (SSSI), Severn Estuary (SSSI), Ashton Court (SSSI) and Leigh Woods (NNR).

Regional and Local Assets and designations

8.12 The primary assets of relevance to the DCO Scheme at regional and local level include open space designations (Town and Village Greens, Local Green Space, Important Open Space and Common Land).

8.13 Designations within or in close proximity to the DCO scheme are covered in more detail within chapters 11 and 9 of the Environmental Statement.



FIGURE 5: Environmental designations

Part 2 Approach and Principles

Scheme Integration and Approach to Good Design

- 9.1 The Portishead Branch Line DCO scheme will re-use the existing railway corridor which was first laid out in the 1860s. This approach minimises the need for land-take. There are no realistic options for alternative routes for the railway outside the existing railway corridor, which in any event is safeguarded in NSDC's Local Plan.
- 9.2 The main areas where options and alternatives were used in the design process are at the access points along the line, and at the two stations proposed for re-opening at Portishead and Pill. Further information about alternatives is included in relevant chapters of this DAS.

10. Railway design standards

10.1 Standards for the rail industry work at many levels and have differing levels of authority. Figure 6 opposite defines the scope and force of standards which are covered in more detail on the following page.

10.2 There are many railway design standards, all consolidated in the categories listed on the following page. Some examples of standards that have been applied to the DCO Scheme design are listed below:

- Lighting standards;
- Culverts and other drainage standards:
- Station information and security systems standards;
- Level crossing standards;
- Accommodation crossing standards;
- Energy standards;
- Mechanical and electrical standards;
- Structural capacity standards;
- Signaling standards including GSM-R system standards;
- Points and train detection standards;
- Event monitoring standards;
- Control centers, interlockings and systems standards;
- Technology standards;
- Public access system standards;
- CCTV standards;
- Passenger information display standards;
- Customer help point standards and
- Passenger shelter standards.

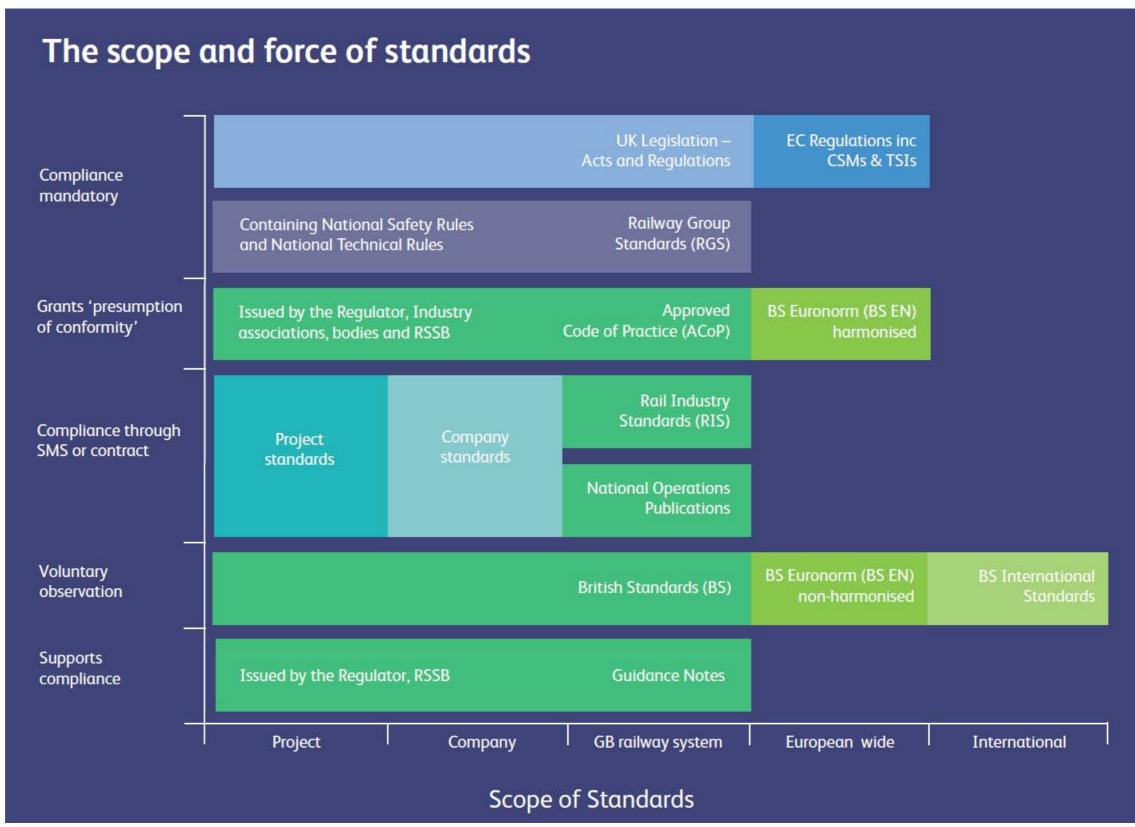


FIGURE 6: The scope and force of standards from Rail Safety and Standards Board website

National Technical Rules

10.3 In Britain National Technical Rules (NTRs) are published as Railway Group Standards are required by the Interoperability Directive, and so are about ensuring levels of technical consistency of railway products and services across the EU.

National Safety Rules

10.4 National Safety Rules (NSRs) are required by the Railway Safety Directive and so are about ensuring consistency in safety across the EU.

National Operational Publications

10.5 National Operations Publications (NOPs) are documents that contain direct instructions for railway staff. The most familiar NOP for Britain's railways is the Rule Book.

Rail Industry Standards

10.6 Rail Industry Standards (RISs) define functional or technical requirements which are not set out in Technical Specifications for Interoperability (TSIs), National Technical Rules or National Safety Rules but which can be used as off-the-shelf company-level standards, procedures and best practice to meet legal aims.

Technical Specifications for Interoperability (TSI)

10.7 TSI define the technical and operational legal requirements for railways in the EU. They ensure consistency of railway products and services in safety, reliability, availability, health, environmental protection, technical compatibility and accessibility.

European and international standards

10.8 European standards (ENs) are Europe-wide standards that help in developing the single European market for goods and services in all sectors.

Company and project standards

10.9 Standards may be agreed at company or project level, for example to manage risk in areas not covered by industry standards or through specific laws, or as a way of providing local detail to legal and standards compliance.

11. Highway design standards

Manual for Streets 1 (MfS1):

11.1 MfS1 is a document produced by the Department for Transport (DfT) and Ministry of Housing, Communities & Local Government, which focuses on lightly-trafficked residential streets, but many of its key principles are applicable to other types of street, for example shopping high streets and lightly-trafficked lanes in rural areas.

11.2 MfS1 does not apply to the Trunk Roads and Motorway network. MfS1 recommends key geometric design criteria to allow streets to be designed as places in their own right while still ensuring that road safety is maintained.

11.3 Low speed streets should not be designed just to accommodate the movement of motor vehicles. It is important that designers place a high priority on meeting the needs of pedestrians, cyclists and public transport users, so that growth in these modes of travel is encouraged.

Manual for Streets 2 (MfS2):

11.4 MfS2 is a document published by the Chartered Institution of Highways and Transportation (CIHT), in collaboration with DfT and the Welsh Assembly Government.

11.5 MfS 2 builds upon the principles set out on MfS1 and is a critical document for highways and traffic engineers working on non-Trunk Road schemes as it fills a gap between

lower and higher speed guidance available. MfS2 does not apply to the Trunk Roads and Motorway network.

11.6 The application of advice given in MfS1 is for all 30mph and below speed limits. Much of the research behind MfS1 for stopping sight distance (SSD) is limited to locations with traffic speeds of less than 40mph and there is some concern that driver behaviour may change above this level as the character of the highway changes. However, 40mph speed limits in built-up areas cover a wide range of contexts, from simple urban streets with on-street parking and direct frontage access to 2/3 lane dual carriageways. Furthermore, local context varies not only from street to street but also along the length of a street.

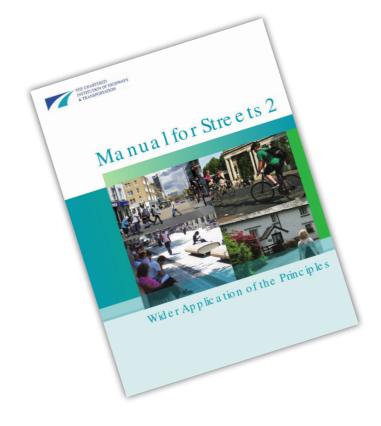
Design Manual for Roads and Bridges (DMRB)

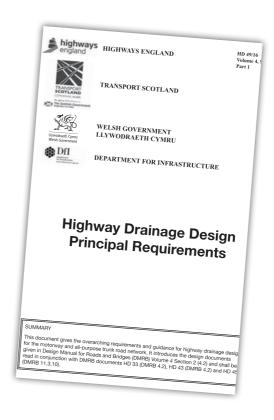
11.7 DMRB is a series of 15 volumes produced by Highways England that provide official standards, advice notes and other documents relating to the design, assessment and operation of high speed Trunk Roads and Motorways in England, Scotland, Wales and Northern Ireland.

NSC Highways Development Design Guide (2015)

11.8 Sets out the standards and approach to design in connection with highways, paths, access and a range of other aspects of highway design. It also sets out the council's expectations in regards of future maintenance arrangements







12. Sustainability

- 12.1 Key principles of sustainability are included below:
- Promoting Sustainable Transport this is one of the driving forces of the DCO Scheme; and
- Reusing Existing Resources where possible we will use existing
 materials or source them locally.

National Planning Policy for Waste (October 2014)

- 12.2 The National Planning Policy for Waste sets out detailed waste planning policies and is intended to be read in conjunction with the NPPF, the Waste Management Plan for England and National Policy Statements for Waste Water and Hazardous Waste.
- 12.3 The assessment of waste management has been integral to the DCO Scheme's development and its compliance with the National Planning Policy for Waste and other statutory waste regulations has been given full consideration.







FIGURES 7 - 9: The existing disused line and ballast (date taken: March 2014)

13. Environment

- 13.1 Key principles of environmental protection are included below:
- 13.2 Paragraph 118 of the NPPF identifies the need to conserve and enhance biodiversity by applying a number of principles. These principles include:
- If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- Development proposals where the primary objective is to conserve or enhance biodiversity should be permitted; and
- Opportunities to incorporate biodiversity in and around developments should be encouraged.

Protecting Key Environmental resources through Design

- 13.3 This includes:
- Avoiding ecological assets through design;
- Replacing lost habitat along the disused line to retain existing green infrastructure corridors; and
- Protecting ecological assets during construction.
- 13.4 Further information is included in Chapter 9 of the Environmental Statement.







FIGURES 10 - 12: Protected species and protective fencing

14. LandscapeCharacter andHeritage

14.1 Landscape Character and Heritage have been protected in the following ways:

Identifying key assets (receptors) that may be effected by the proposal

14.2 Section 12 of the NPPF:
Conserving and Enhancing the
Historic Environment, specifically
paragraph 128, which states that
in determining applications, local
planning authorities should require an
applicant to describe the significance
of any heritage assets affected,
including any contribution made by
their setting.

14.3 Chapters 8 and 11 of the Environmental Statement include further information as to Key Assets, their susceptibility to change and how they are protected from the development.

Reducing the magnitude of change experienced by these receptors

14.4 Sensitive receptors which have been identified in the Environmental Statement have been carefully considered in the design.

14.5 It should be remembered that the existing freight line and disused line are being used for the proposed passenger service. The existence of the operational railway means there is no sensible alternative route for the DCO scheme proposals.







FIGURES 13 - 15: Existing railway corridor, Clifton Suspension Bridge (date taken: June 2018) and view from Clifton (date taken: Feb 2018)

Part 3

Engagement and Design Development

15. Public Consultation, Stakeholder Engagement and Workshops

The DCO Scheme has been included in sub-regional and local transport policy for many years. Therefore it has been subject to a series of strategic engagements and consultations including:

- West of England Joint Transport Study (JTS) and Joint Spatial Plan (JSP) consultation;
- Local authority planning including Core Strategies; Local Plans; Sites and Policies Plans; Supplementary Planning documents; and Neighbourhood Development
- Joint Local Transport Plan 3 (JLTP3) consultation;

- Strategic Economic Plan (SEP) consultation;
- West of England Multi-Area Agreement, Local Economic Assessment, LEP Business Plan; and
- MetroWest Stakeholder meetings (including engagement with rail interest groups).



FIGURES 16: Consultation on the 6 Portishead Rail Station options (date taken: June 2014)

Project Specific Consultations

DCO Scheme specific consultations have also been undertaken, and have informed the design and technical development of the DCO Scheme. To date the following public consultations have taken place:

- Portishead station location Micro

 consultations 2013, 2014 and
- Formal Stage 1 Scheme Consultation June 2015:
- Design and layout of Pill Station Micro-Consultation - February 2016;
- Alternative Highway Access to Ashton Vale Road Industrial Estate (Part 1 – Options Long-list) Micro-Consultation - February 2016;
- Alternative Highway Access to Ashton Vale Road Industrial Estate (Part 2 – Options Short-list) Micro-Consultation - November 2016; and
- Formal Stage 2 Scheme Consultation October 2017.

Primary Stakeholders and Consultees

15.1 The following is a list of some of the stakeholders that were consulted throughout the design process.









Environmental Statutory Consultees

- EA;
- Natural England;
- The Coal Authority;
- Internal Drainage Boards;
- Canal and River Trust;
- Forestry Commission;
- The Joint Nature Conservation Committee;
- Avon Wildlife Trust;
- Avon Gorge and Downs Wildlife Project;
- Forest of Avon;
- West of England Nature Partnership;
- Abbots Leigh Wildlife Group;
- Heritage and Conservation;
- Historic England / English Heritage;
- Relevant AONB Conservation Boards (Cotswolds AONB, Mendip Hills AONB);
- The Crown Estate;
- Clifton Suspension Bridge Trust;
- Historical Railways Estate;
- The National Trust;
- Friends of Bristol Suburban Railways;
- Portishead Railway Group;
- Clifton & Hotwells Improvement Society;
- Friends of WatchHouse Hill (Pill);
 and
- Ashton Court Estate.

Statutory Undertakers

- Bristol Water / Wessex Water Ltd;
- Public Gas Transporters;
- Electricity Distributors / Transmitters; and
- Telecommunications providers.

Councils

- Bristol City Council;
- North Somerset Council;
- Neighbouring Councils;
- The Relevant Parish Council(s) or Relevant Community Councils; and
- Neighbourhood Partnerships.

Health and emergency

- Health and Safety Executive;
- Avon and Somerset Police and Crime Commissioner:
- Avon Fire and Rescue; and
- NHS England.

Infrastructure

- Highways England;
- Network Rail Infrastructure Ltd;
- Department For Transport;
- Bristol Harbour Authority / Bristol Port Company;
- Bristol Airport Limited;
- Office of Rail and Road;
- Commercial Utilities:
- Transport for Greater Bristol Alliance;
- Campaign for Better Transport; and
- South West Transport Network.

Homes and communities

- Homes England;
- Trinity School, Portishead;
- Equalities groups; and
- Business groups.

Public Access

- Sustrans:
- British Horse Society; and
- Cycle / Right of Way Forums.

Part 4

Portishead Railway Station

16. Introduction – what and why

16.1 A new station is required at Portishead where the railway line will terminate.

16.2 There needs to be pedestrian and cyclist links to and from the station as well as appropriate design of the public realm.

16.3 In addition a new pedestrian and cycle bridge is required to facilitate safe passage across the rebuilt railway.

17. Existing Site Context

17.1 The original Portishead station was closed and demolished in 1954 to facilitate access to the new Portishead B Power Station. A new station was built (where the petrol station now stands) but was closed a decade later as the passenger services between Portishead and Bristol Temple Meads ceased in 1964.



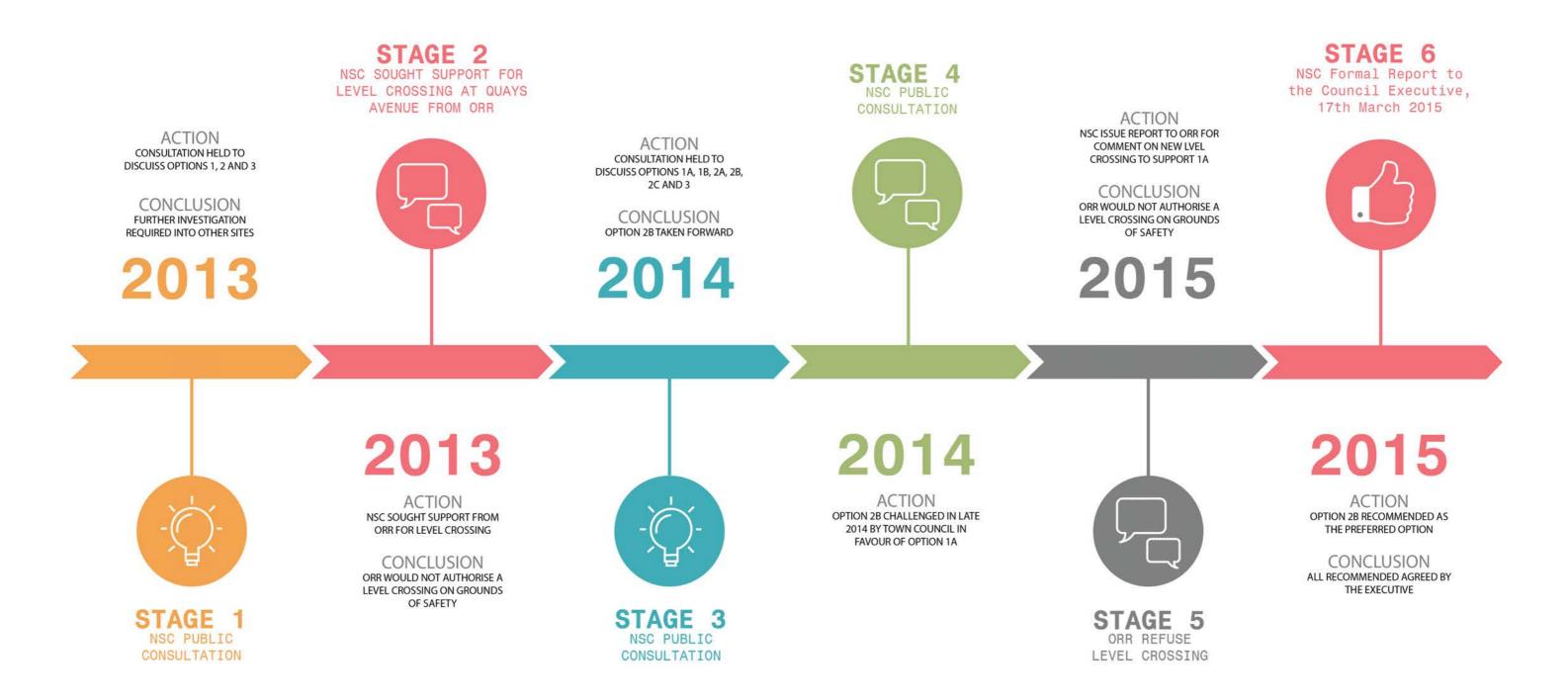
FIGURES 17: Existing site context







FIGURES 18-20: Existing site context (date taken: March 2015)



18. Local Planning Policy Context

West of England Joint Local Transport Plan

18.1 In respect of the transport policy context the principal document is the West of England Draft Joint Local Transport Plan 4 2019-2036 (January 2019).

18.2 The document was produced and formally endorsed by B&NES, BCC, NSDC and SGC. It sets out the overarching transport policies for the sub-region and sets out priorities, interventions and specific proposals for all modes of transport, including heavy rail.

18.3 The JLTP contains key policy themes to achieve the following:

- Reduce carbon emissions:
- Support economic growth;
- Promote accessibility;
- Contribute to better safety;
- Security and health;
- Improve quality of life; and
- A healthy natural environment.

18.4 The JLTP provides the policy framework for investing in our strategic rail corridors to improve accessibility to and service provision of the local rail network.

18.5 Both the Portishead rail corridor and the Greater Bristol Metro projects (which have since been merged into MetroWest Phase 1 and Phase 2) are supported for early delivery.

The North Somerset Core Strategy

18.6 The North Somerset Core Strategy sets out seven vision statements, vision five relates specifically to Portishead, as follows.

- "Vision 5 Portishead Vision: By 2026
 Portishead will have undertaken an extensive period of consolidation and become an increasingly popular location for new business as well as providing opportunities for existing local businesses to expand and grow.
- There will be increased opportunities for residents to work locally, reducing an over reliance on commuting to Bristol and its north fringe.
- Access by public transport within Portishead and between the other towns will be improved.
- A passenger rail or rapid transit link into central Bristol will have been reinstated, providing a real alternative to residents commuting into Bristol for work.
- Portishead will continue to be a popular place to live while retaining the existing distinctive character and village atmosphere of the High Street.
- The new and old communities in Portishead will be integrated and share a joint sense of place and pride in the town. The newly extended High Street will be a thriving and popular place to shop and spend time."

The Core Strategy policies relevant to the proposed development are:

- CS1 Addressing climate change and carbon reduction;
- CS3 Environmental impacts and flood risk management;
- CS10 Transport and movement;
- CS20 Supporting a successful economy;
- CS26 Supporting healthy living and the provision of health care facilities; and
- CS31 Clevedon, Nailsea and Portishead.

Sites and Policies Plan Part 1: Development Management Policies

18.7 A summary of policy relating to the proposed DCO Scheme included in **Appendix 2**. The list below summarises this policy:

- Flooding and Drainage;
- Conservation areas;
- Listed Buildings;
- Historic Parks and Gardens;
- Archaeology;
- Non designated heritage assets;
- Nature Conservation;
- · Landscape;
- Development within the green belt;
- Green Infrastructure;
- Motorway Junctions;
- Existing and proposed railway lines;
- Traffic and parking standards;
- PROW:
- · Royal Portbury Dock; and
- Protection of community facilities.

Sites and Policies Plan Part 2: Site Allocations (Adopted 10 April 2018)

18.8 Those policies of particular relevance to the DCO Scheme are presented below:

- SA1: Housing Allocations This policy identifies land that has been safeguarded for future housing development.
- SA5: Local Green Space Aims to protect amenity areas of public value from unacceptable harm or loss; and
- SA4: Employment Allocations

 This policy identifies land that has been safeguarded for future employment development.

The North Somerset Replacement Local Plan 2007 policy T/3 narrative (now superseded) stated:

"The importance of the station as a principal gateway to the town – forming first impressions – should not be under-estimated. The character, quality and local distinctiveness of the town needs to be reflected in the design of the station and it's approaches."

18.9 The Replacement Local Plan policies relevant to the proposed development are:

- GDP/1 Preferred locations for development;
- GDP/2 Environmental and public protection;
- E/4 Proposals for new business development with towns and defined settlements;
- T/1 Existing and proposed railway lines;
- T/3 Proposed railway stations;
- T/10 Safety, traffic and the provision of infrastructure associated with development; and
- RT/1 Strategy for revitalising the town and district centres.

18.10 Policy T/10 of the RLP states:

"Development giving rise to a significant number of travel movements will only be permitted if it: i) is not likely to lead to an unacceptable degree of traffic congestion or generate traffic that cannot be accommodated without seriously affecting the character of the surrounding area and can readily be integrated with public transport, cycleway and footpath links and bridleways where appropriate."

Portishead Station Options Appraisal report, June 14

18.11This report assessed 6 location options and short listed 3 options for further consideration.

19. Station Location Options

- 19.1 A number of options were modelled and tested based on an analysis of the existing baseline situation in combination with a needs assessment.
- 19.2 In February 2013, North
 Somerset Council undertook public
 consultation on its Sites & Policies
 Development Plan Document
 (Consultation Version). As part of the
 consultation the council published
 an evidence paper: Re-opening
 Portishead Railway Line and Options
 for the Location of Portishead Railway
 Station.
- 19.3 The three station sites were:
- Option 1 Town Centre location on Harbour Road Option 2 – Peripheral Town Centre location on Quays Avenue Option 3 – Edge of Town location on

land north of Moor Farm

- 19.4 An on-line consultation was undertaken together with staffed exhibitions held in Portishead. A total of 147 consultation responses were received. In summary there was both support and objections for option 1 and option 2, while for option 3 there was no support and 25 objections. Furthermore there were suggestions for the council to consider other station site options.
- 19.5 In respect of options 1 and 2, the consultation responses gave a mixed picture, with both receiving both support and objections. While option

- 1 received the greatest support, it had considerable deliverability challenges.
- 19.6 The council decided to seek support from the Office of the Rail Regulation (ORR) for a level crossing on Quays Avenue. The ORRs' response was that it did not support a level crossing stating that
- "Level crossings are the greatest source of risk on the rail network, primarily in terms of risk to individual

- pedestrians or vehicle users, but also to passengers in trains colliding with vehicles and then derailing."
- 19.7 Furthermore in relation to the volume of traffic using Quays Avenue the regulator stated
- "...the risk arising from a new level crossing would be high, even at the train speeds prevailing 450 meters from the terminal. ORR would not authorise a new crossing at this point."
- 19.8 It was concluded that a bridge would be the next solution, but on further analysis it was found that there was not sufficient space for a standard bridge, therefore some departures from design standards would be necessary in order to fit a bridge into the available space.
- 19.9 The design of the bridge has a number of wider implications, including highway impacts, environmental impacts and cost.
- 19.10 Option 2 had both support and objections and requires minimal infrastructure to implement. However, some consultation responses were concerned about localised environmental impacts and were concerned about commercial development (the station) within very close proximity to existing residential properties.



FIGURE 22: Scheme options 1,2 and 3

JUNE 2014

19.11 In June 2014, 6 options were presented at consultation. These were:

- Site Option 1A previously labelled option 1;
- Site Option 1B additional option immediately east of option 1A;
- Site Option 2A previously labeled option 2;
- Site Option 2B additional option immediately west of option 2A;
- Site Option 2C additional option immediately west of option 2B; and
- Site Option 3 as previously labelled option 3;

19.12 A more detailed description of each option is included below.

Option 1A

Location: Rear of Travelodge, Harbour Road.

19.13 The Office of Rail Regulation has confirmed that a level crossing at Quays Avenue will not be permitted. Consequently this option requires a road over rail bridge. There is not sufficient room for a standard road bridge. The bridge design requires a steeper gradient and this causes reduced line of sight, which means the junction would have to be signal controlled.

19.14 The overall environmental impact of the bridge is significant due to the highway being raised over 5 meters above the existing highway level, very close to existing residential / commercial property. The cost of the bridge is not within the funding

envelope and would compromise the project business case.

Option 1B

Location: Opposite Pure Offices Harbour Road

19.15 Requires significant third party land /property, causing impact to commercial business. Requires closure of Quays Avenue (to through traffic) and a new highway link from Harbour Road to Wyndham Way, but this new link be an indirect route and would have a severe highway

impact as it would increase pressure on key junctions, causing delays and longer journey times. It is unlikely these highway modifications would be acceptable to North Somerset Council as the highway authority.

Option 2C

Location: Between Serbert Road and Harbour Road

19.16 Requires some third party land / property, including partial demolition of commercial property. Requires some highway modifications to form

a new highway link connecting
Harbour Road to Serbert Road, as
a result of closing Quays Avenue to
through traffic. Highway modifications
cause some traffic impacts. Car park
is located across the road from the
station.

Option 2B

Location: Across Quays Avenue

19.17 Requires some third party land/ property. Requires some highway modifications to re-align Quays Avenue and create a new junction at Haven View. Option 2B was selected as the preffered option.

Option 2A

Location: East of Quays Avenue

19.18 No highway modifications.
Location is close to existing residential property and would cause some localised environmental impacts.
More limited space for station forecourt / facilities. Car park is located across the road from the station.



Option 3

Location: North of Moor Farm Sheepway

19.19 This location is not within easy walking distance of the town centre and has a much lower catchment of households within 1 kilometre. This location requires a new highway link and junction.

19.20 Location is close to some existing residential property and is in the green belt, however overall has a more limited localised environmental impact.

Key Policy that guided decision making (some now superseded)

Planning & Land Use Policies North Somerset Council Core Strategy and applicable elements of the Replacement Local Plan (now superseded).

WoE Joint Local Transport Plan Relevant policies include 'Support economic growth' and 'Promote Accessibility' etc

Highway Development Management Policy Replacement Local Plan policy T/10 Safety, traffic and the provision of infrastructure associated with development (now superseded).

Equalities Impact Assessment Requirements include race, gender, disability equality, sexual orientation, religion or belief and age

Project Objectives

- support economic growth;
- deliver a more resilient transport offer;
- improve accessibility to the rail network;
- make a positive contribution to social well being;
- contribute to reducing traffic congestion;
- contribute to enhancing the capacity of the local rail network; and
- contribute to reducing the overall environmental impact of the transport network.

Option 2B

Site is in an area zoned as commercial and the use is commercial. Site is more peripheral to the town centre but pedestrian/cycle promenade link would provide strong link to the town centre. Good policy fit.

600m from town centre, ample space for station forecourt / facilities and corner (prominent) site. Good policy fit.

Re-alignment of Quays Avenue and form a new roundabout junction with Haven View, with some modifications to Phoenix Way. Main station car park is within station grounds. Overall provides a good policy fit.

The required highway modifications would accord with statutory accessibility standards. The footbridge near Trinity School would be fully accessible, likewise the station car park and station platform would meet all accessibility standards. Overall good policy fit.

Policy Fit:

- excellent policy fit
- excellent policy fit
- · excellent policy fit
- excellent policy fit
- good policy fit
- · good policy fit
- excellent policy fit



FIGURE 24: Consultation for each option (date taken: June 2014)

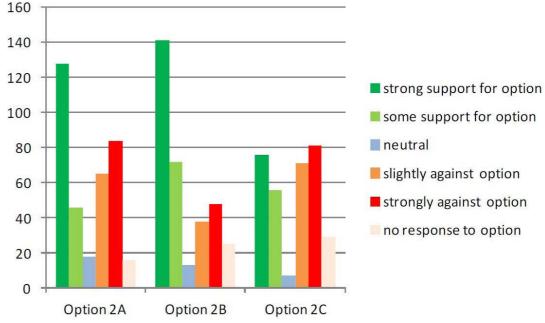


FIGURE 25: Evaluation of support for each option (Portishead Station Options Appraisal Report - June 2014)

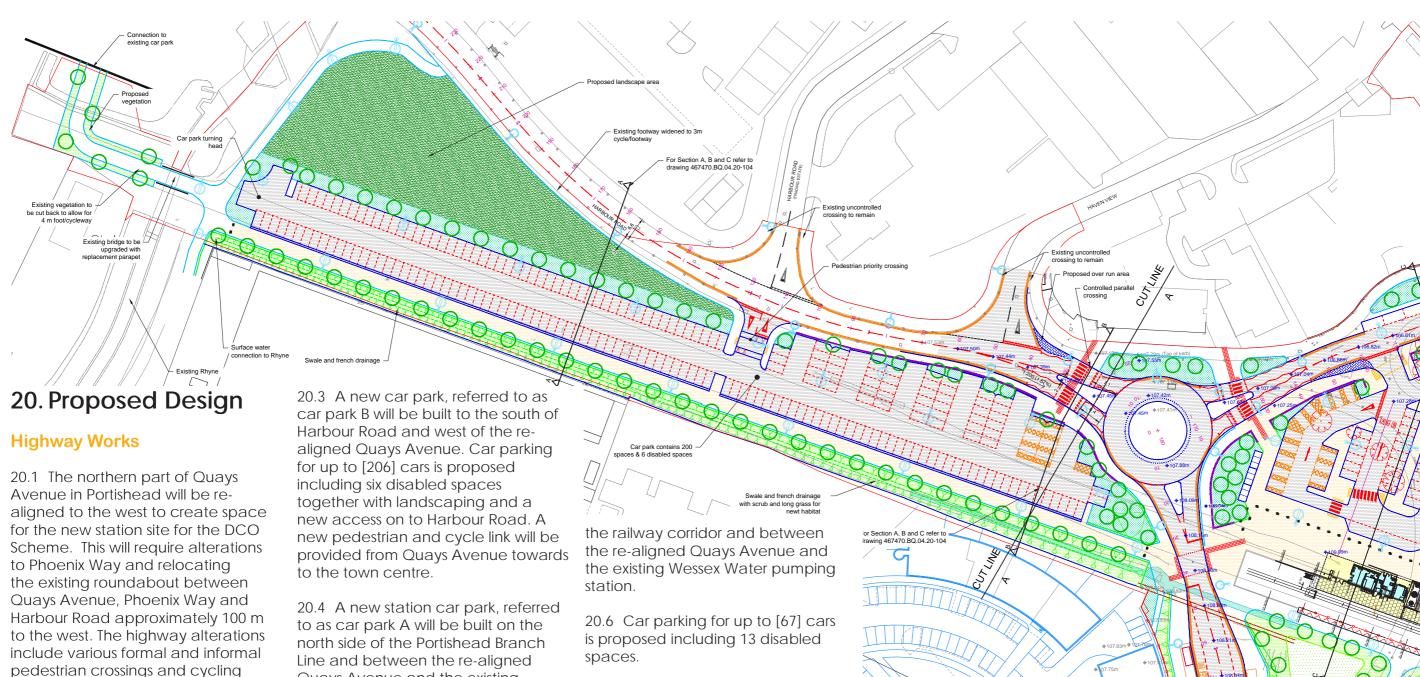


FIGURE 26: Portishead Station proposed scheme



FIGURE 27: Portishead Station access to proposed scheme

Key



20.2 Traffic Regulation Orders (TRO) are proposed in the form of double yellow lines with loading bans along Harbour Road, Phoenix Way and Quays Avenue and restricted parking on Phoenix Way.

route enhancements.

Quays Avenue and the existing Wessex Water pumping station, south of Phoenix Way.

Station Works

20.5 The new Portishead Station will be constructed on the north side of 20.7 A GSM-R mast will be located at Portishead Station. This allows communication between the train driver and the signaller.

20.8 The station will comprise of a canopy structure sheltering the station building and a section of the single platform.

CUTLINE

FIGURE 28: Portishead Station proposed scheme (For further info refer to drawing 467470.BQ.04.20-100)

20.9 The building will include a ticket office, waiting area and public toilets. There will also be an external mechanical and electrical compound and bin area.

The Platform

20.10The platform is to be approximately 130 m long which is sufficient to provide active provision for a five car train. CCTV, train departure information displays, and a public address system will be provided on the platform. The platform will be lit by luminaires on lighting columns. Security fencing will be required with separate timber accoustic fencing to the south side of the track. A Relocatable Electronics Building ("REB") will also be provided.

Associated Access Works

20.11The station will link with proposed paths along both the north and south side of, and parallel to, the railway, connecting with the proposed Trinity Primary School Bridge.

20.12 A combined pedestrian and cycle link to the town centre will be provided using the section of disused railway to the west of the realigned Quays Avenue, alongside the southern edge of the car park.

20.13. The existing access routes linking with the surrounding residential area will be altered and improved, from Galingale Way to the Trinity Primary School Bridge on the south side and from Tansy Lane to the Trinity Primary School Bridge on the north side.

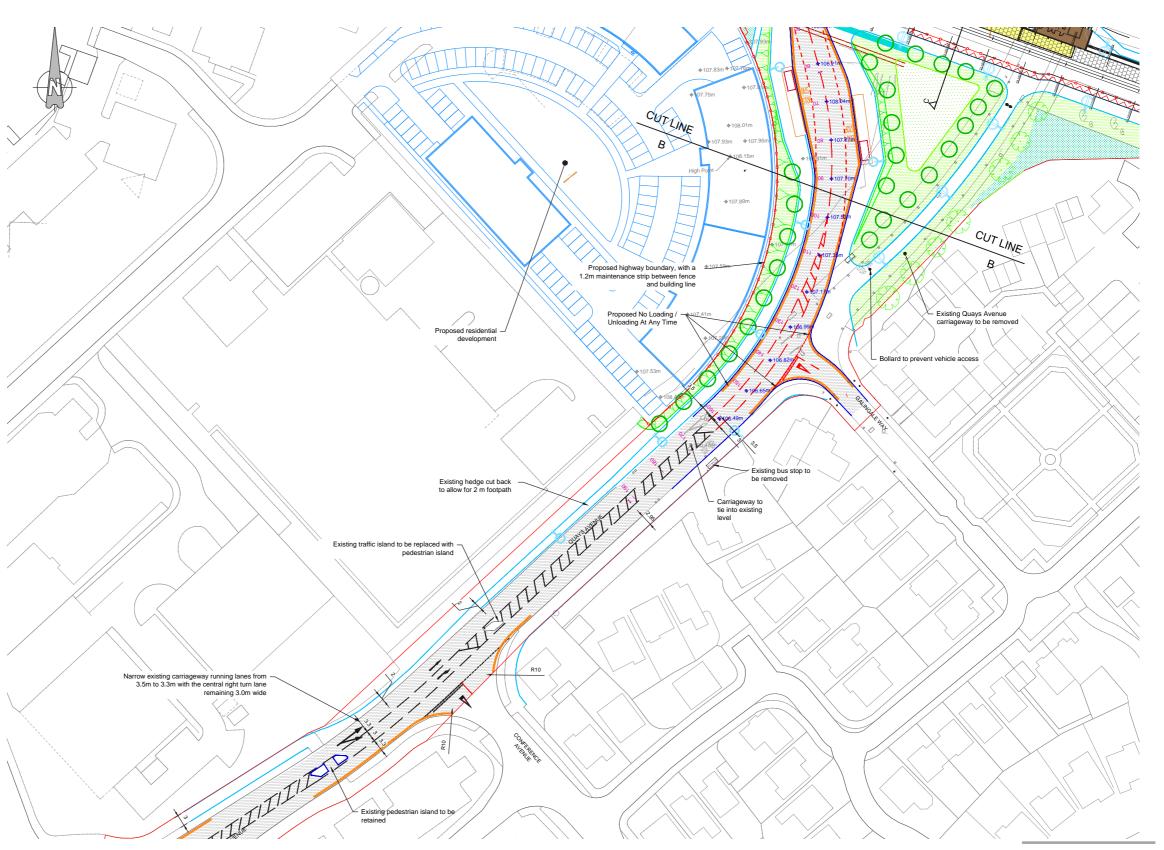


FIGURE 29: Portishead Station proposed scheme (For further info refer to drawing 467470.BQ.04.20-100)

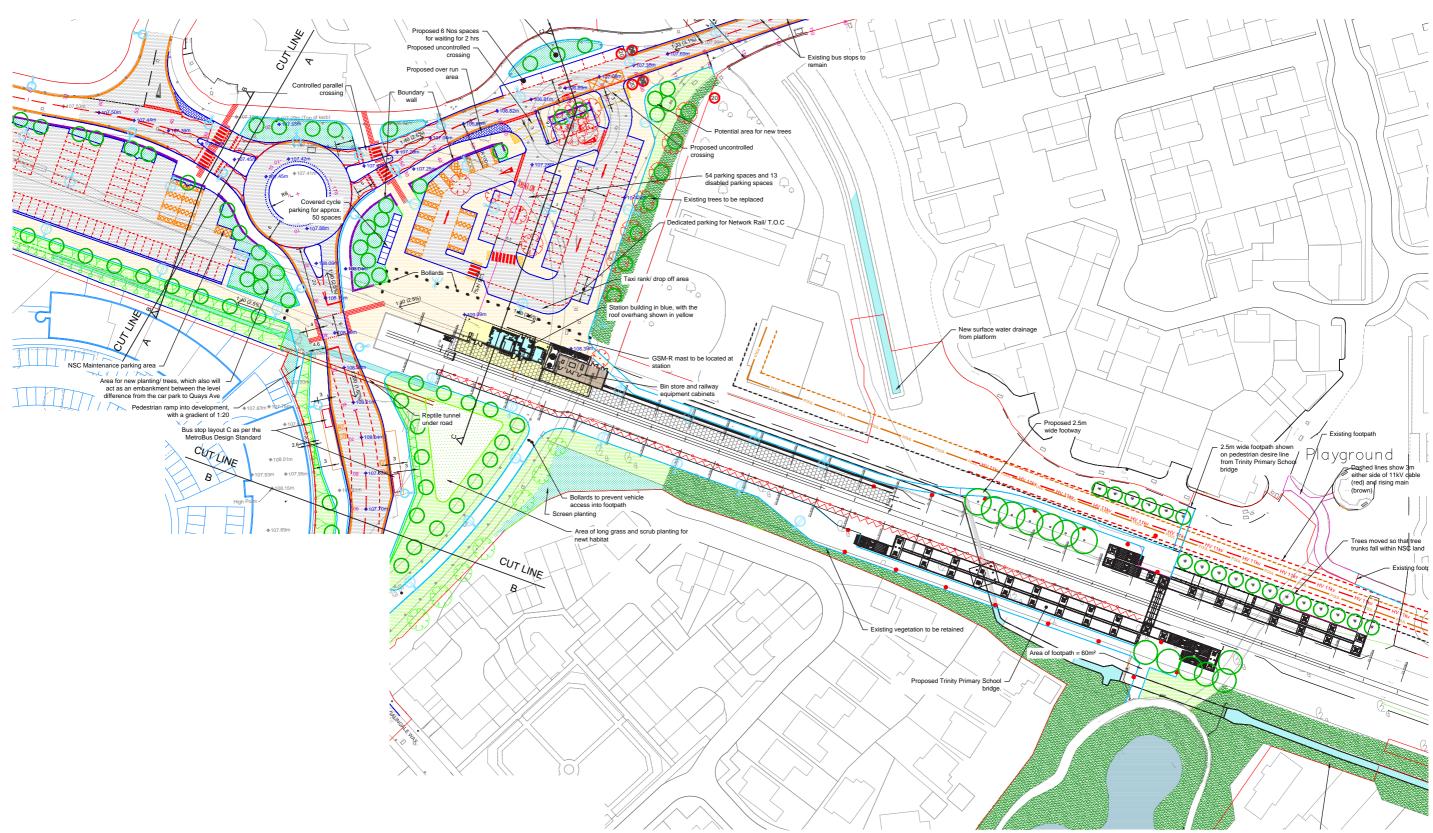


FIGURE 30: Portishead Station proposed scheme (For further info refer to drawing 467470.BQ.04.20-100)

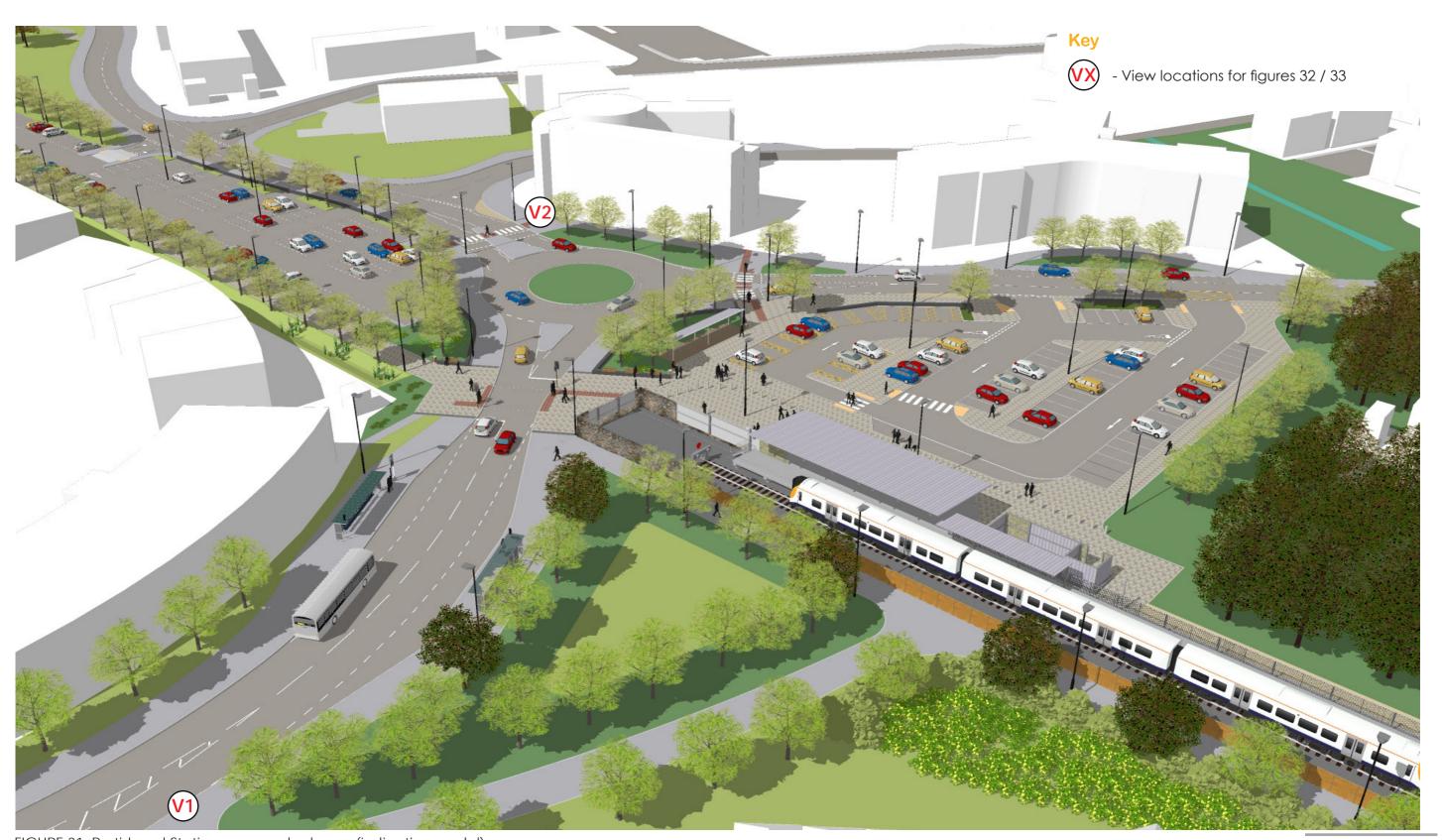


FIGURE 31: Portishead Station proposed scheme (indicative model)





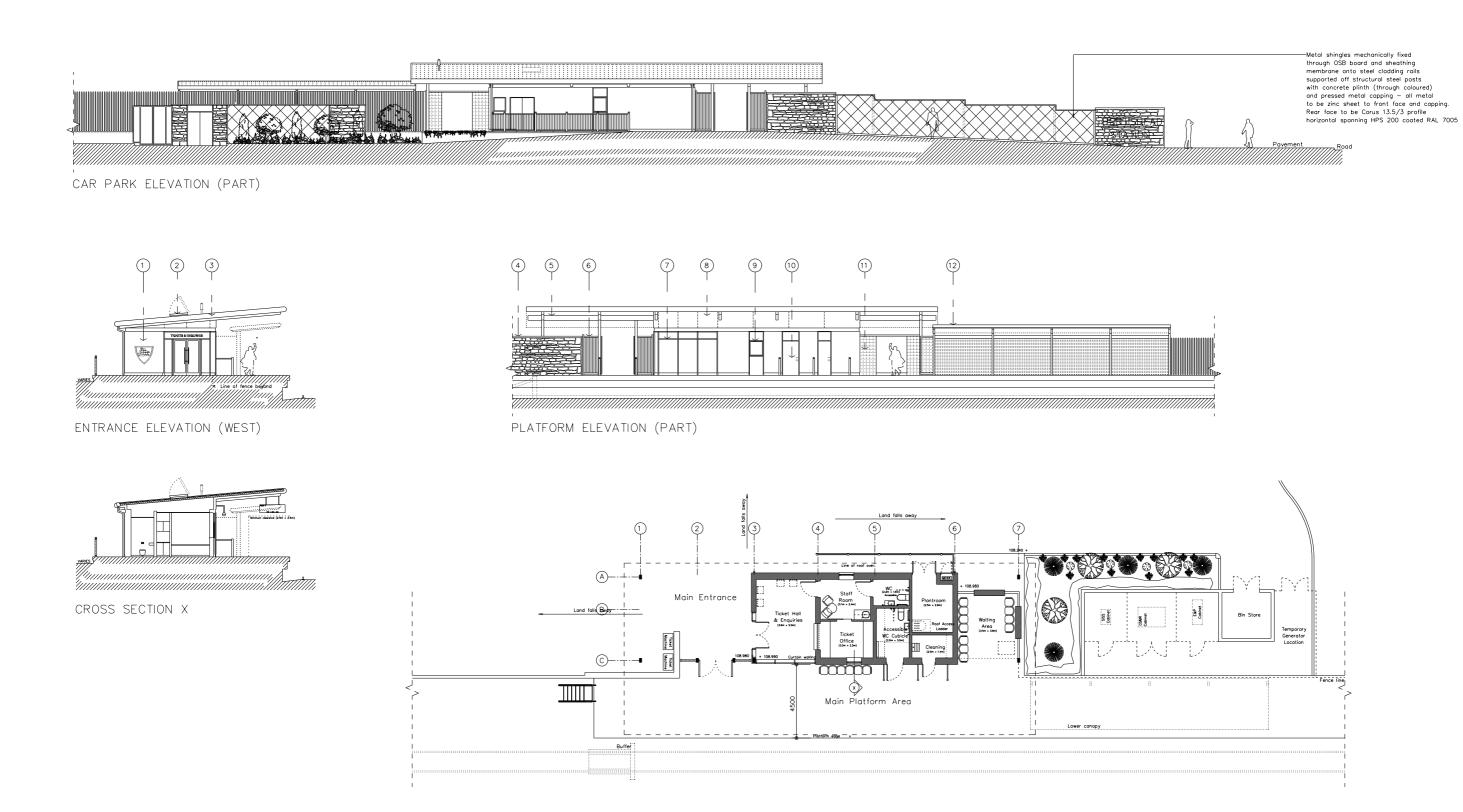


FIGURE 34: Portishead Station proposed scheme (For further information see drawing W1097B-ARP-DRG-EAR-101110)

21. Integration of the functional components / Materials

















FIGURES 35: Indicative materials (Source: Extracts from various manufacturers online catalogues)

Part 5 Pill Railway Station

22. Introduction – what and why?

22.1 Pill station is located within a cutting bordered by Monmouth Road to the north east and to the west Hardwick Road and Sambourne Lane. Pill station was opened in 1867 and closed in 1964. The platforms along the southern and northern side of the railway line are still visible, but are in a poor state of repair. The DCO Scheme includes re-opening Pill station as a single platform on the southern side of the railway.

The proposal includes the following:

- A new car park for rail users will be created on the site of the former goods yard, at Monmouth Road, on the north side of the Portishead Line, providing an estimated 58 spaces. Three disabled spaces are provided at the station forecourt;
- The site will also have a permanent compound for Network Rail including a road rail access point and a Principal Supply Point building ("PSP");

- Vehicle restraint barrier and lighting;
- Emergency refuge;
- New access to the railway station;
- Bus stop improvements;
- New pedestrian ramp and new staircase access down to the platforms;
- A new station forecourt containing three disabled parking spaces and a car passenger drop off area.
- A shelter by the entrance will house a ticket machine, waiting area, seating and cycle parking for about 20 bicycles;
- Rebuilt platform; and
- A small shelter will be provided on the platform in front of the pedestrian ramp. Public Announcement speakers, CCTV and lighting will be provided.



FIGURE 36: Existing Site











FIGURES 37 - 41: Existing Site and Site Context. (Date taken: V1: August 2015, V2-V4: March 2015, V5: March 2018)

23. Design Rationale

23.1 The DCO Scheme has largely sought to keep within the footprint of the former railway line, including at Pill where the proposed station is located at the site of the former station.

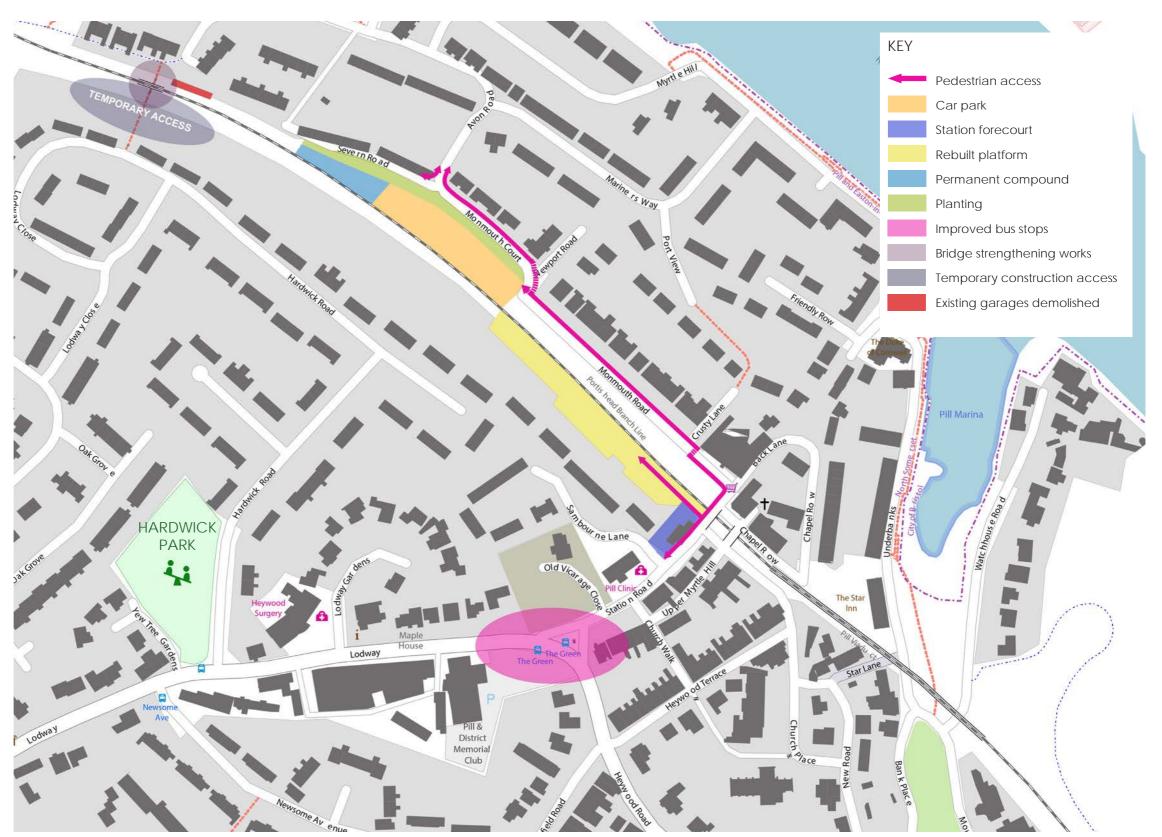
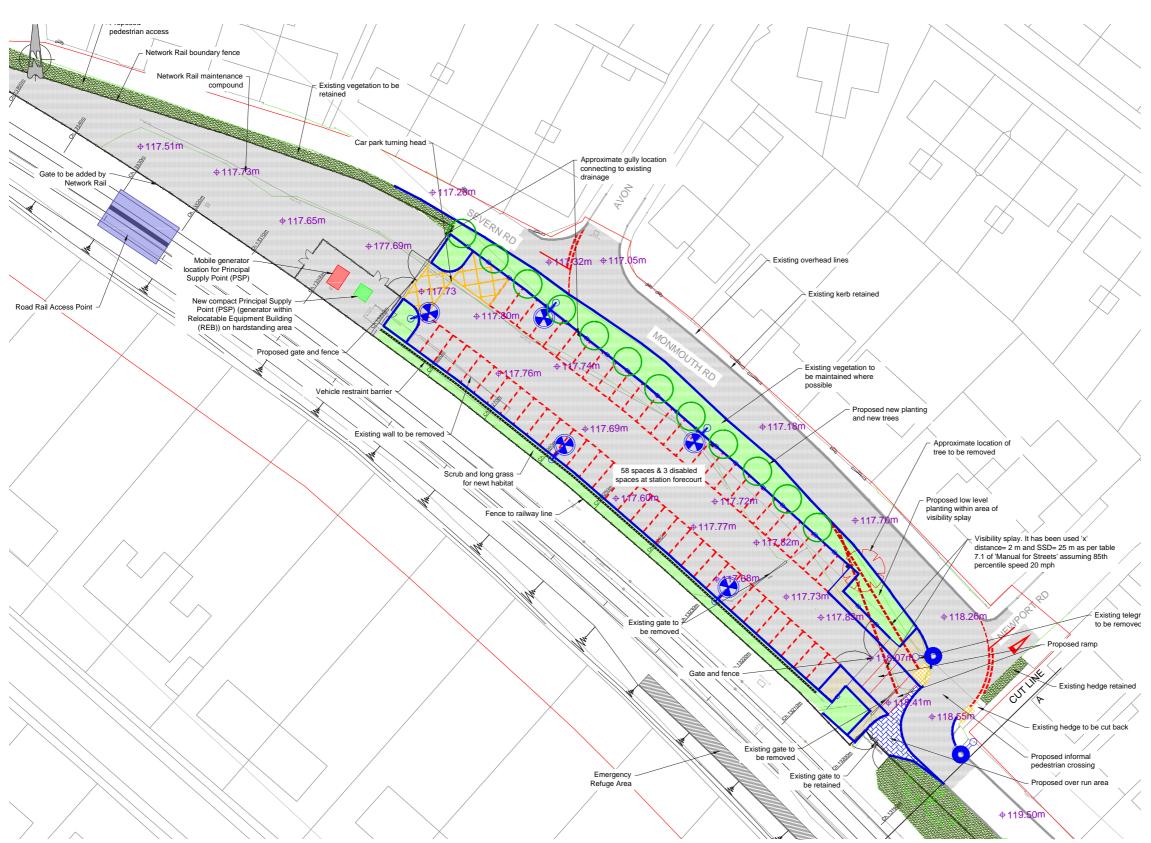


FIGURE 42: Opportunities and constraints



24. Proposed Design

Car Parking

24.1 Vehicle movements into and out of the car park will be via the entrance at the south east end off Monmouth Road. Trees on Monmouth Road will have to be removed and low level planting provided near the proposed entrance to maintain adequate visibility splays for vehicles.

24.2 A vehicle restraint barrier will be provided along the southwestern edge of the car park and a security fence will be installed along the railway boundary. Scrub and long grass will be planted between the car parking area and proposed fence parallel to the railway, which can provide habitat for reptiles and amphibians.

Permanent Maintenance Compound

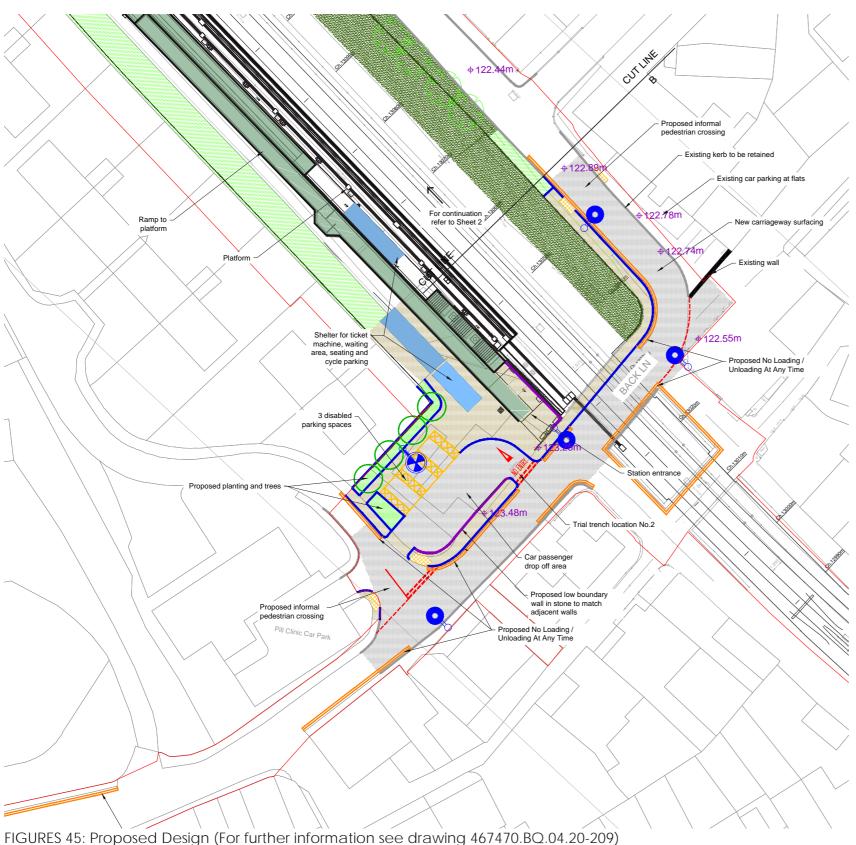
24.3 A new compact Principal Supply Point (PSP) generator within a Relocatable Equipment Building (REB) on hardstanding area, along with a mobile generator is proposed.



FIGURE 44: Proposed Design (For further information see drawing 467470.BQ.04.20-208)

Access to the Station

- 24.4 The pedestrian route to the re-opened Pill Station from the car park, up Monmouth Road and across Station Road bridge to the railway station, will be signposted. The existing planting along Monmouth Road between the car park and Station Road will be maintained to screen views of the station and the station lighting.
- 24.5 Double yellow lines will be included as a Traffic Regulation Order on a part of Monmouth Road at the junction with Station Road to prohibit on road parking at all times.
- 24.6 The access to Pill Station will be off Station Road on the south side of the road over-bridge. A new pedestrian access 2 m wide, 109 m long with a gradient of 1 in 22 will be constructed from the site of the new station forecourt to the platform.
- 24.7 Improved bus service with new stops on the realigned Quays Avenue providing a direct, comfortable route to the station.
- 24.8 The access will be formed integral with the retaining wall, supporting the railway alignment cutting. The first 79 m will descend from the station forecourt towards the station platform, with a 180° turn, and the remaining 30 m of the ramp will descend to the platform in the direction facing the new station entrance. A new staircase 2 m wide and 11 m long, will also be installed adjacent to the ramp to provide additional access.



24.9 In order to achieve sufficient space for the new pedestrian access, platform and emergency refuge area, the existing cutting slope will need to be regraded and strengthened.

Station Forecourt

24.10 No. 7 Station Road will be demolished and initially the site will be used as a small construction compound before being laid out as the station forecourt with access down to the platforms.

24.11 The station forecourt will include three disabled parking spaces and a car passenger drop off area. A shelter by the entrance will house a ticket machine, waiting area, seating and cycle parking for about 20 bicycles. Vehicular access into and out of the new station forecourt will be one-way, with the entrance off Sambourne Lane and the exit on to Station Road.

Platform

24.12 The existing Down (southern) platform at the disused Pill railway station will be removed and re-built. The new platform will be a minimum of 3.3 m wide and 126 m long to provide active future provision for a five car train. A small shelter will be provided on the platform in front of the pedestrian ramp (shown in blue).

24.13 An emergency refuge area will be provided at the Down (Portishead) end of the platform in the event of a fire on the train in the station. It is indicated on figures 43 & 44 as a hatched area.

24.14 The platform will be lit to standard compliant levels.

24.15 CCTV and public announcement speakers will also be provided on the platform.

24.16 There will be minor works to the up platform and slopes on the northern side of the railway, but they will continue to look much as they are today.



FIGURES 46: Proposed station design with stepped and ramped access





FIGURES 48: Proposed station car park



25. Integration of the functional components / Materials















FIGURE 50: Indicative materials (Source: Extracts from various manufacturers online catalogues)

Part 6 Access Works

25.1 The access points for the scheme are listed below. Some are temporary during construction and some are permanent access and egress points for maintenance and these have been differentiated in the text.

25.2 The following pages contain descriptions of some of the permanent and temporary access and egress points to the track.

ACCESS AND EGRESS TO THE LINE

25.3 The following access points can be found on the Compound, Haul Road and Access to Works Plan within the Environmental Statement (document 2.29).

Portishead (dwg no. 674946. BQ.42.01-381)

- Harbour road (Access to Works 1.1 and 1.3) both used during construction (temporary) and permanent access post construction; and
- Quays Avenue (Access to Works1.2 and 1.4) AW 1.2 is to be used as temporary access during construction and AW 1.4 is permanent access post construction.

Sheepway (dwg no. 674946. BQ.42.01-382 and 383)

- Sheepway Road (Access to Works 2.1 and 2.3) temporary access during construction;
- Sheepway Road (Access to Works 2.2) access during and post construction (permanent); and
- Sheepway Road (Access to Works 3.2 and 3.3) access during construction.

The Portbury Hundred (dwg no. 674946.BQ.42.01-383)

 The Portbury Hundred (Access to Works 3.1 and 4.1) access during and post construction;

M5 Bridge

- Marsh Lane (Access to Works 5.1 and 5.3) access during construction only;
- The Breaches (Access to Works 5.2) access during construction only;

Pill

- Avon Road (Access to Works 6.1) access during construction only;
- Severn Road (Access to Works 6.2) access during construction only;
- Station Road (Access to Works 6.4 and 6.5) access during construction only;
- Permanent access at the western portal of Pill Tunnel; and
- Underbanks (Access to Works 6.3) access during construction only.

Chapel Pill

 Chapel Pill Lane (Access to Works 8.1 and 8.2) AW 8.1 is to be used as temporary access during construction and permanent access post construction and AW 8.2 is to be used during construction.

Leigh Woods

 Tow path (Access to Works 11.1) access during and post construction (permanent).

Abbots Leigh Road

 A369 Abbots Leigh Road (Access to Works 11C.1) access during construction only.

Avon Gorge

- Access to Network Rail gate (Access to works 12.1) pedestrian access during and post construction (permanent);
- Miles Dock (Access to Works 10.1) pedestrian access during and post construction (permanent);
- Clifton tunnel tow path (Access to Works 12.2) access during construction only; and
- Clifton Suspension Bridge tow path (Access to Works 13.1) access during and post construction (permanent).

Rownham Hill

 A369 Rownham Hill (Access to Works 14.1) access during construction only.

Bower Ashton

- A369 Clanage Road (Access to Works 15.1) access during and post construction; and
- A369 Clanage Road (Access to Works 15.2) access post construction.

Ashton Vale

 Winterstoke Road(Access to Works 16.1) access during construction only.

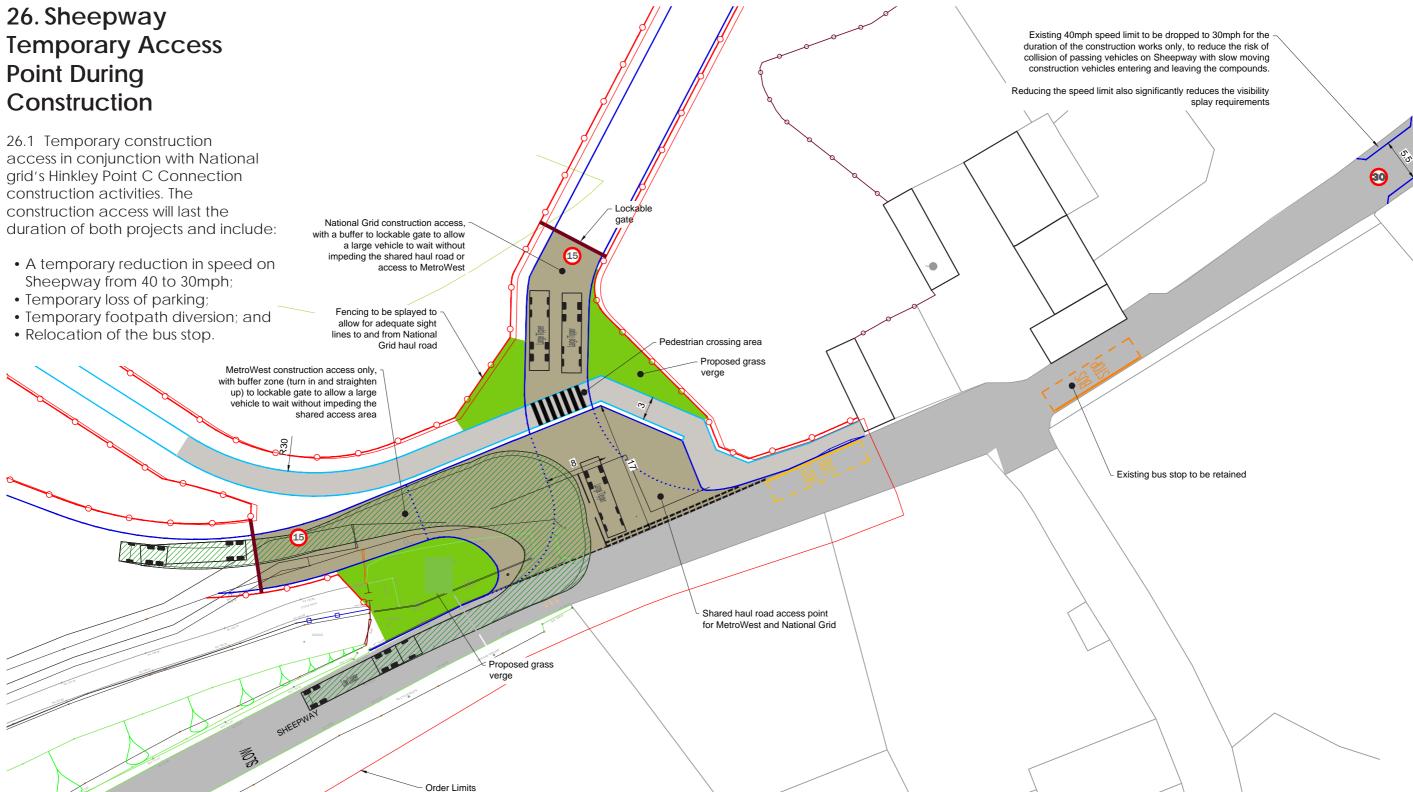
Parson Street

 South Liberty Lane (Access to Works 17.1) access during construction only.

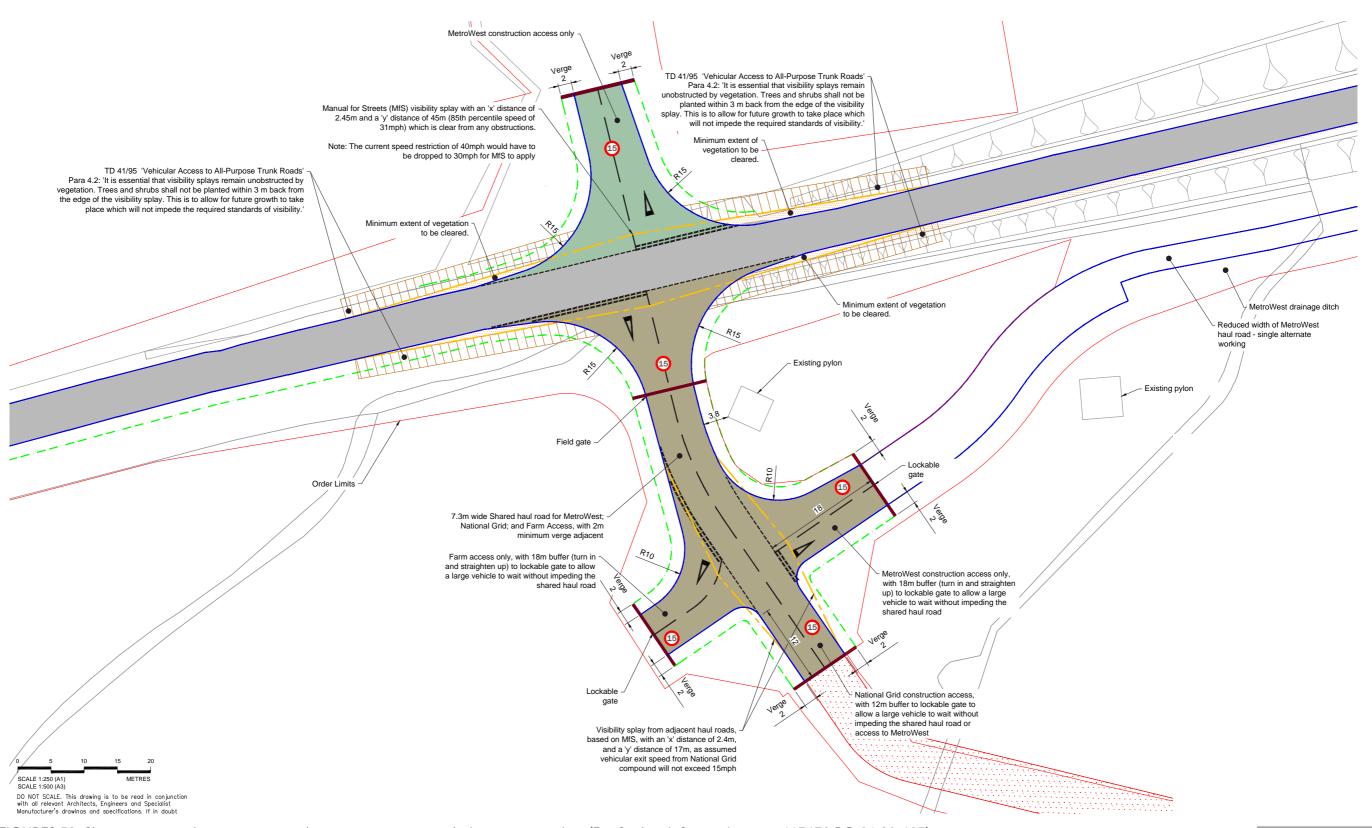
Temporary Access Point During Construction

access in conjunction with National grid's Hinkley Point C Connection construction activities. The construction access will last the duration of both projects and include:

- Sheepway from 40 to 30mph;



FIGURES 51: Temporary access at Sheepway during construction (For more information see 467470.BQ.04.20-404)

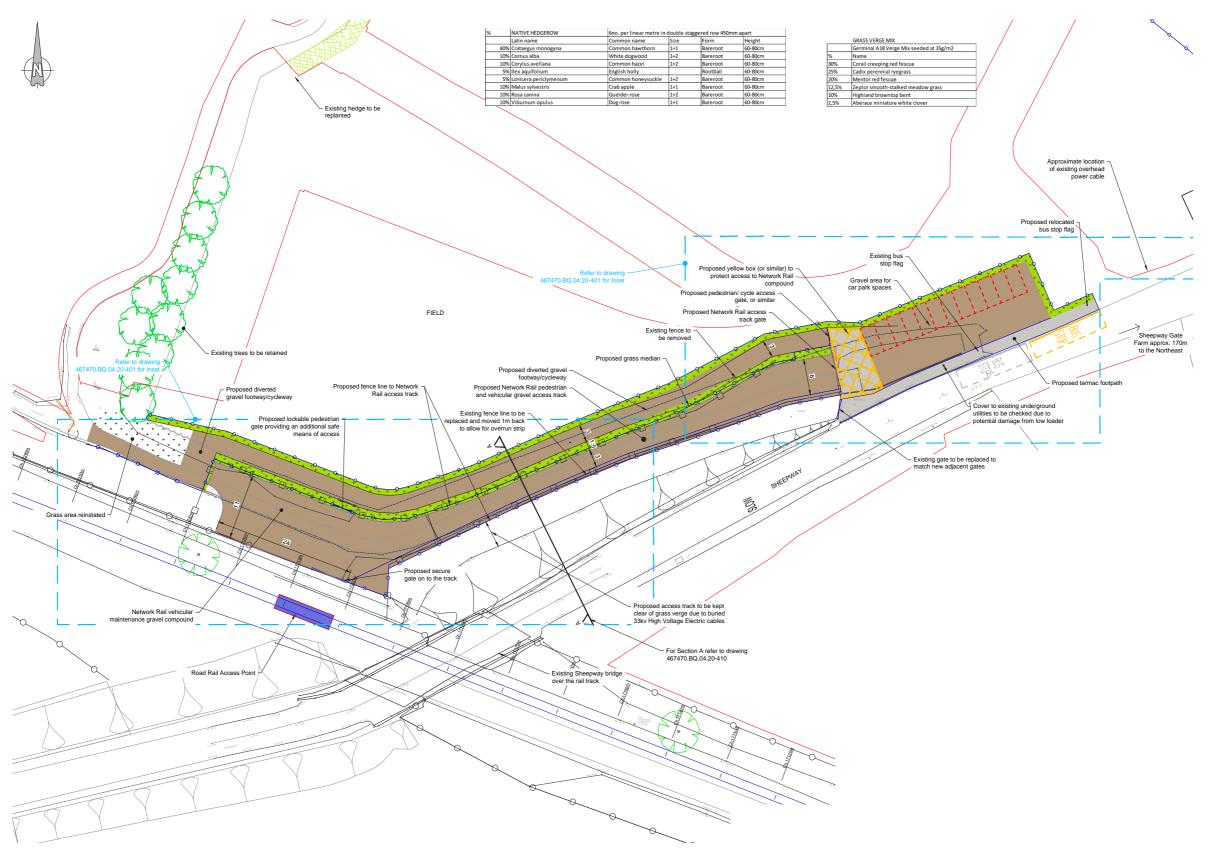


FIGURES 52: Sheepway southern compound temporary access during construction (For further information see 467470.BQ.04.20-405)

27. Sheepway permanent access point

- 27.1 This permanent access point has been selected due to it's location outside the main residential area of Portishead and therefore disturbance caused by maintenance activities will not directly affect nearby properties. The alternative location would be at the station building and forecourt which requires space for access for large vehicles which is limited, and would be close to houses.
- 27.2 Its location adjacent to the track and close to the Sheepway Bridge embankment means it is well enclosed and screened from the surrounding landscape.
- 27.3 An area off the highway is required to unload road rail vehicles. The existing parking area is expanded to allow a low loader to pull in off the highway, to reverse up to the gate, and allow road rail vehicles down the access track to the railway. The low loaders would have to approach from the west and continue eastwards. This avoids the need to provide a large area to turn low loader vehicles.
- 27.4 The existing car park is extended (in order to create the unloading area) which also allows for more parking at this recreation area.
- 27.5 The bus stop is repositioned with an area of tarmac paving and new kerbs.

- 27.6 A tarmac footpath is proposed between the existing road surface and the car parking area. This connects the bus stop to the footpath and also separates the parking from the road.
- 27.7 The Network Rail access track and maintenance compound/ parking area would be securely fenced with its own gate. An additional pedestrian gate is required to provide an additional safe means of exit.
- 27.8 The access track would be a gravel surface to maintain the rural character.
- 27.9 Space for 4 vans and an area for turning has been allowed in the compound area.
- 27.10 No lighting is proposed.
- 27.11A grass verge separates the maintenance compound and track from the adjacent footpath.
- 27.12 The existing footpath would be surfaced in gravel, with a field boundary fence separating it from the adjacent field.
- 27.13 No hedge and tree planting is proposed to avoid effects on owls which forage in this area.
- 27.14 A new access point close to the western edge of the bridge abutment, has been provided to gain access to the farm land to the south of the railway line.



FIGURES 53: Sheepway maintenance access - Permanent layout (467470.BQ.04.20-400)

28. A369 Portbury Hundred access

28.1 Access to the construction compound off the Portbury Hundred is required.

28.2 This has been designed as a 'left in, left out' junction so that vehicles entering and leaving the construction compound do not need to cross on-coming traffic. This means vehicles approaching from the M5 motorway will need to pass the access point, and turn at the Portbury Common/Wyndham Way/Sheepway roundabout.

28.3 DMRB Volume 6, Section 2 document TD 42/95 'The Geometric Design of Major/Minor Priority Junctions', is a technical document which provides guidance on the geometric Design of priority junctions associated with Trunk Road or Motorway's. This has been applied to Portbury Hundred due to its high speed as well as high levels of vehicular traffic.

28.4 Figure 37/1 in TD 42/95 sets out the visibility splay requirements for the junction, with Table 7/1 stating the visibility distance based upon the design speed of the major road.

28.5 Existing trees would need to be removed to create the access point and further vegetation either removed or cut back to create the visibility splays.

28.6 Sufficient space has been allowed to enable large vehicles to leave the Portbury Hundred

completely before needing to stop at any gate. This also means any gate can be closed behind a large vehicle leaving the compound before the vehicle needs to join the Portbury Hundred.

28.7 This access point will remain after construction for the landowner as farm access.

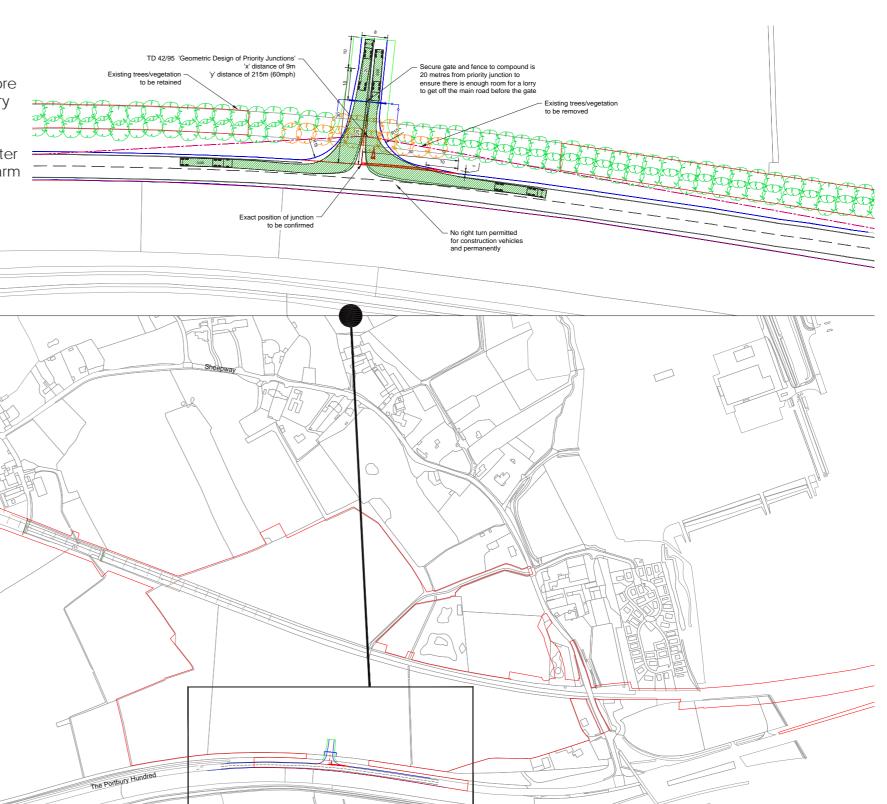


FIGURE 54: Portbury Hundred Compound access proposal (for further information see drawing 467470.BQ.04.20-600)

29. Pill Tunnel Access Point Eastern Portal

- 29.1 Access is required for emergency vehicles to the Pill Tunnel eastern portal. It has been designed to allow for a fire engine to gain access to the side of the track where it is at the same level as the surrounding landform, and for it to turn around.
- 29.2 The emergency access point also allows for maintenance activities with a road rail access point for vehicles coming off the railway to park. Existing levels and steep slopes mean that it is not possible to turn low loaders around on a level area without extensive earthworks and / or retaining walls.
- 29.3 Low loaders are able to leave the highway and unload vehicles at the northern end of the access track. This requires the vehicle to reverse into the track area, otherwise a large area of land would be required for a turning area.
- 29.4 The access track allows for a single vehicle with a passing place where the track turns the corner.
- 29.5 Due to the need for emergency access and existing ground slopes, a tarmac surface is proposed. This will mean that emergency vehicles do not potentially get stuck in gravel or wet ground.

- 29.6 A grass verge separates the access track from the hedgerow to the west, reducing the potential effect on adjacent tree and hedge roots. A hedge with trees and a fence is proposed to the north and east of the access track to provide visual screening.
- 29.7 The turning area is raised above existing ground, set back from the lake edge and existing mature trees. The proposed slopes are planted with a woodland.
- 29.8 The area would be fenced in accordance with Network Rail standards.
- 29.9 No lighting is proposed.
- 29.10 A small area is required for a temporary construction compound for the works here.
- 29.11The existing right of way for access to the lake would be reinstated close to its existing alignment adjacent to the new access route.



FIGURE 57: Pill Tunnel Eastern Portal proposal (467470.BQ.04.20-221)

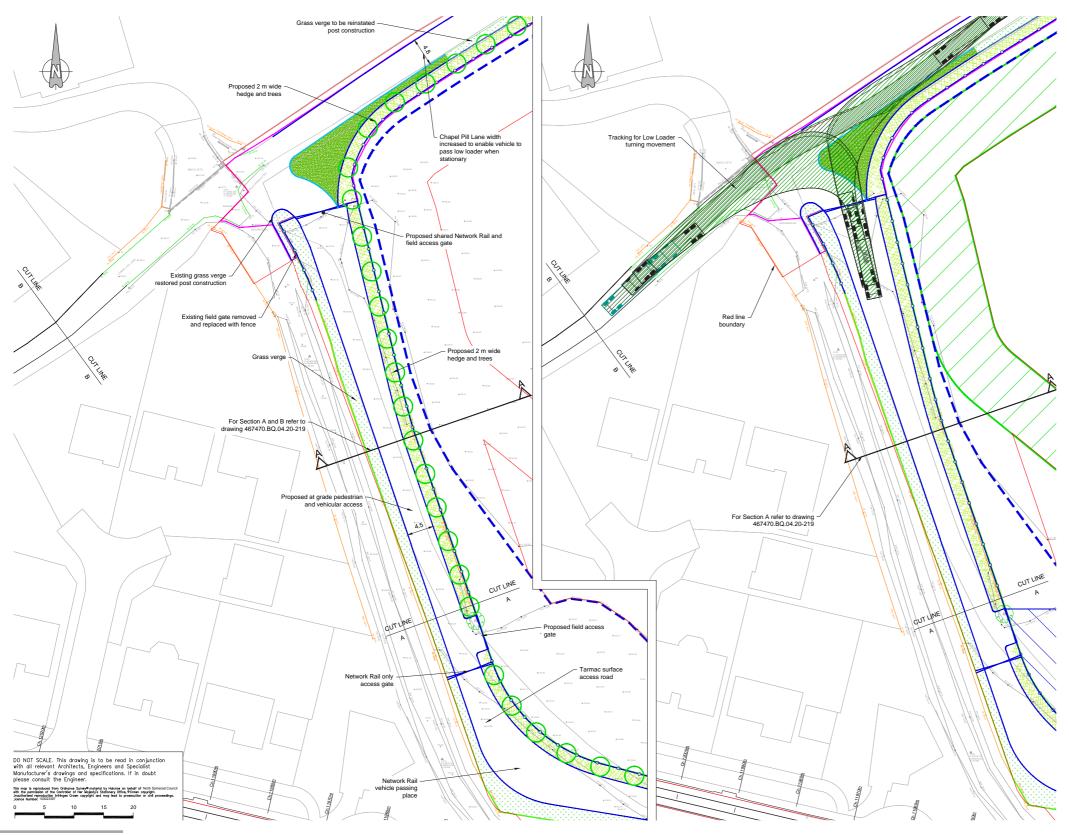


FIGURE 58: Pill Tunnel Eastern Portal proposal (467470.BQ.04.20-221)

30. Clanage Road

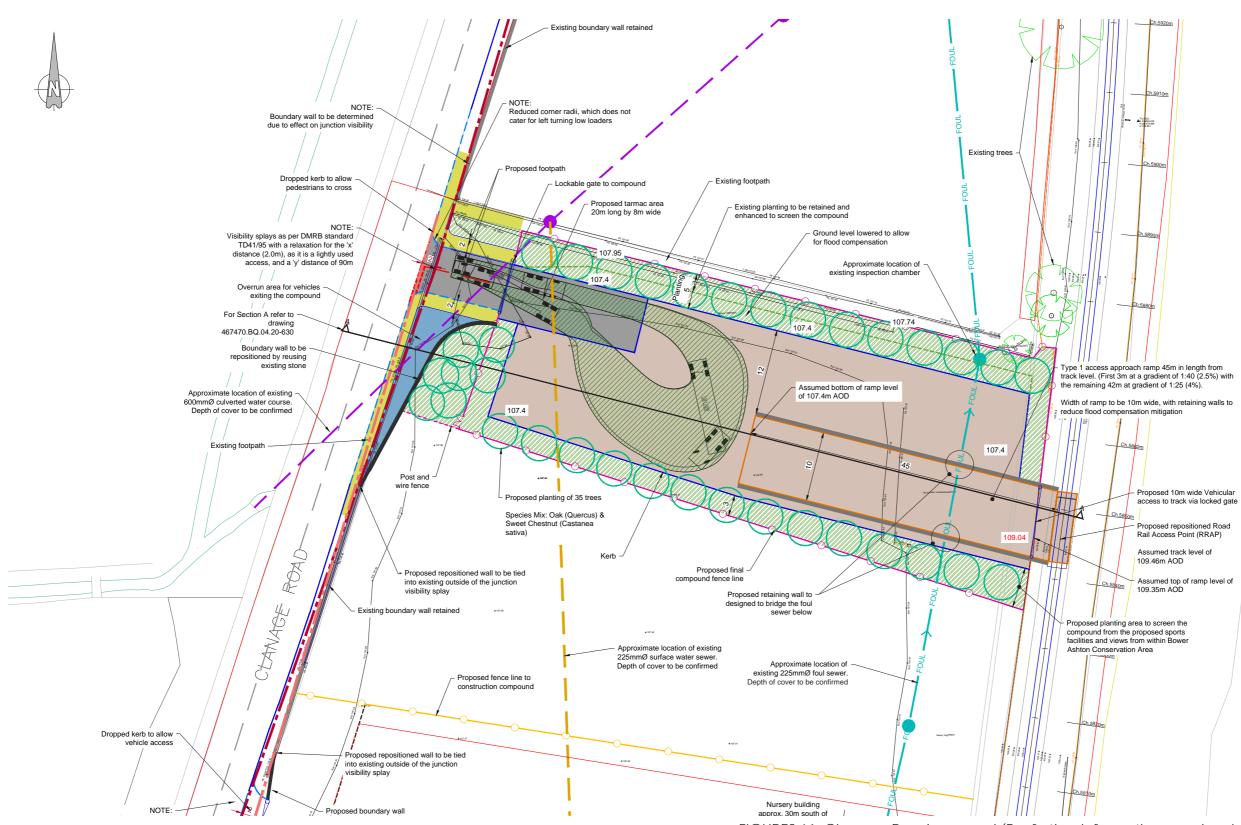
- 30.1 The Clanage Road access compound is required to provide maintenance access to the track. It is located at the southern end of Avon Gorge where no road rail access is currently possible.
- 30.2 The size of the permanent compound has been determined by the minimum space required to turn a low loader and unload vehicles and the need to provide a ramp from existing ground levels up to the track for road rail vehicles. The compound will be lowered.
- 30.3 The existing vegetation on the north side would be replaced to provide visual screening.
- 30.4 New planting is proposed along the southern boundary to provide visual screening from the south.
- 30.5 The surface of the compound would be gravel with tarmac for the entrance area only. The ramp to the track would be constructed with safety barriers either side.
- 30.6 The entrance into the compound off Clanage Road is 'right in left out'. This reduces the footprint of the junction which would otherwise mean the loss of adjacent trees and other planting. This also minimises changes to the adjacent footpath.

- 30.7 DMRB Volume 6, Section 2 document TD 41/95 'Vehicle Access to All-Purpose Trunk Roads', is a technical document which provides guidance on the geometric design of minor connections for vehicular access onto an all-purpose trunk road, which ranges from a field gate with a verge crossing or a direct access serving a single dwelling or a small development.
- 30.8 If the total amount of traffic forecast to use the connection exceeds 500 vehicles per day (AADT) then it should be designed according to the appropriate junction Standard.
- 30.9 The footway would extend into the bell-mouth of the entrance so that pedestrians do not need to cross the widest point of the compound entrance.
- 30.10 The existing boundary wall would be rebuilt to the back of the footpath to maintain the visual continuity of the boundary.
- 30.11 The area would be fenced in accordance with Network Rail standards.
- 30.12 No lighting is proposed.
- 30.13 A new access point for the adjacent land is proposed to be provided to the south. This is located outside the temporary construction compound so that it can be built and operated without interference from the construction works and subsequent maintenance access. The existing stone wall would be rebuilt to allow for visibility spays and a new gate provided.





FIGURE 59 - 60: Clanage Road proposal



FIGURES 61: Clanage Road proposal (For further information see drawing 467470.BQ.04.20-621)

Part 7 Other Works

30.14 The following pages show the proposed improvements to the existing bridleway on Royal Portbury Dock Road, improvements to the bridleway east of the M5 Avonmouth Viaduct, improvements to the Winterstoke Road Ashton Gate Road Junction including the pedestrian and cycle ramp.

31. Royal Portbury Dock Road

- 31.1 Works include improvements to the existing bridleways on either side of Royal Portbury Dock Road. The existing uncontrolled crossing will be improved to provide a suitable sized refuge area for horses and bicycles.
- 31.2 This provides an improvement to the alternative route so that cyclists and equestrians to not have to pass under Royal Portbury Dock Road adjacent to the railway line.
- 31.3 Existing roadside vegetation will need to be removed to improve visibility between vehicles and those wishing to cross the road.
- 31.4 A holding area for horses waiting to cross is proposed either side of the road with the surface material to match the existing bridleways. The holding areas would be enclosed by timber fencing.
- 31.5 DMRB Volume 6, Section 3 document TA 90/05 'The Geometric Design of Pedestrian, Cycle and Equestrian Routes', is an advice note which provides guidance on the geometric Design for Non-Motorised Users (NMU) off-carriageway routes associated with Trunk Road or Motorway's. This has been applied to Royal Portbury Dock Road as this is the main highway link from the port entrance to Junction 19 of the M5.

31.6 Figure 3.3 in TA 90/05 sets out the visibility splay requirements for the NMU route which crosses the highway, with Tables 3.3 and 3.4 stating the 'Preferred' and 'Acceptable' distances.

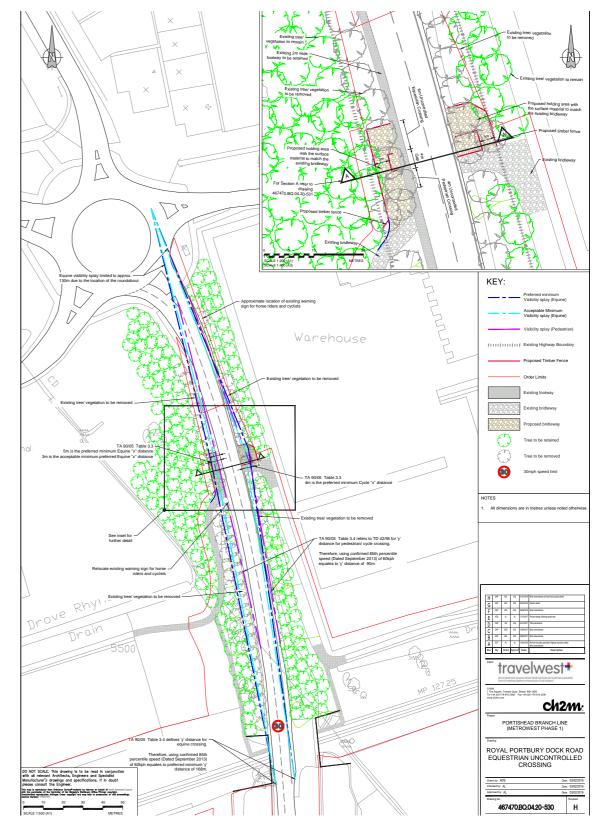


FIGURE 55: Royal Portbury Dock Road proposal (for further information see drawing 467470.BQ.04.20-530)

32. M5 Bridleway

- 32.1 Minor improvements to the bridleway to the east of the M5 Avonmouth Viaduct will provide an alternative route for horses, cyclists and pedestrians, to avoid the section of bridleway immediately adjacent to the railway as it passes underneath the M5.
- 32.2 Timber gates would be provided at either end of the proposed path.
- 32.3 The path connects to the existing hard standing under the M5 and the existing bridleway which connects to Marsh Lane to the west.
- 32.4 The exact alignment is to be determined following detailed topographical survey and examination of ground conditions.

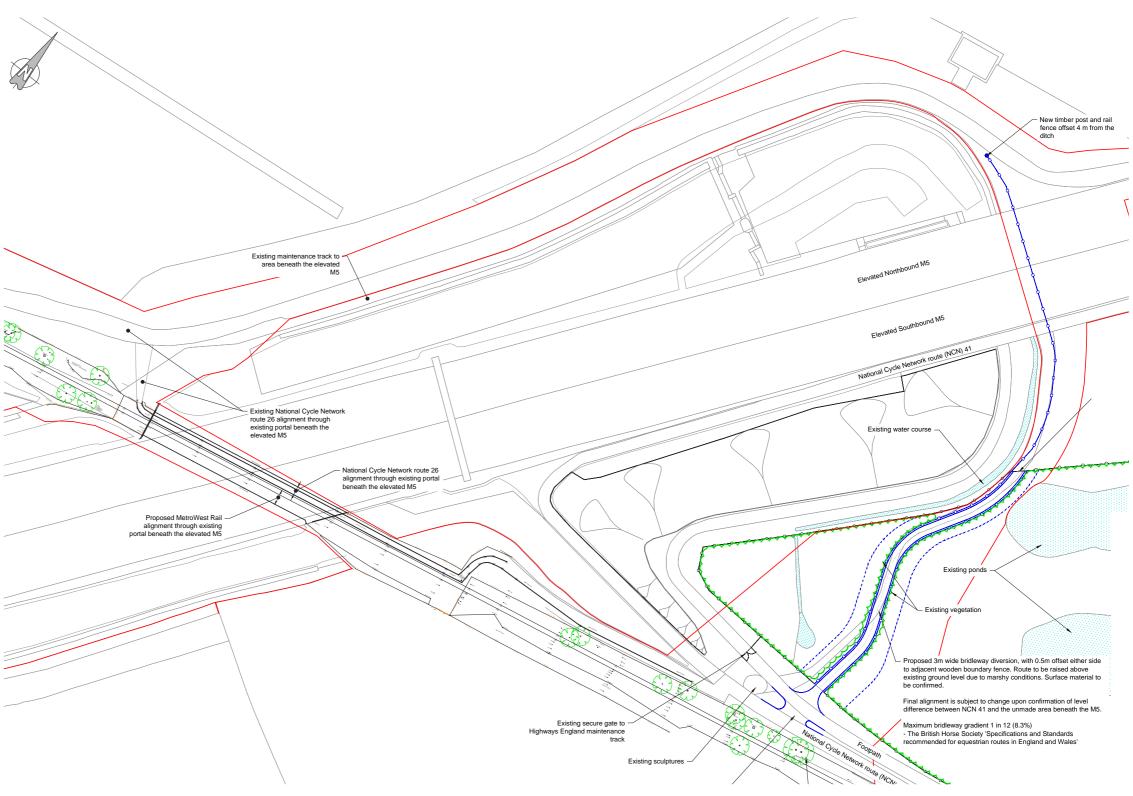
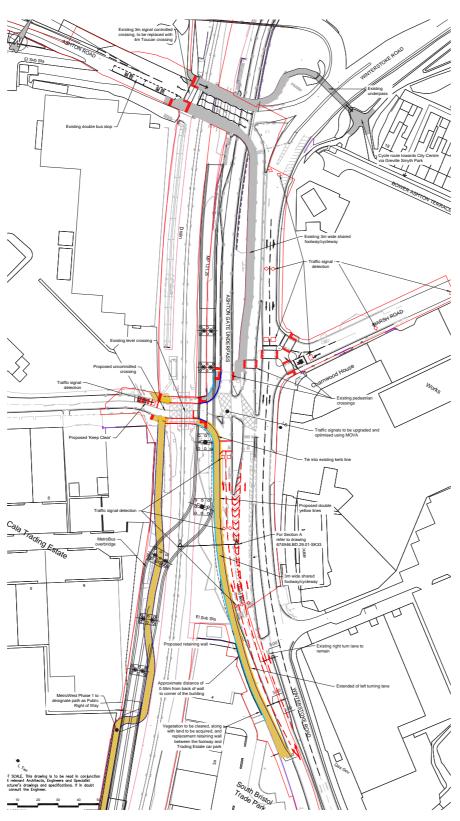


FIGURE 56: M5 Bridleway proposal (for further information see drawing 467470.BQ.04.20-520)

33. Winterstoke Road junction

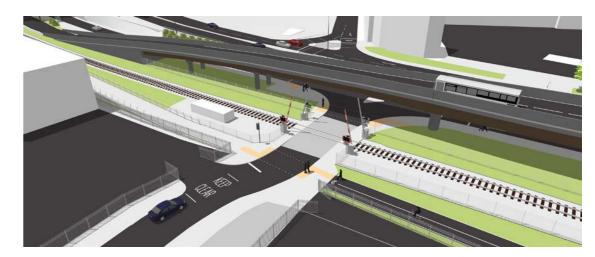
- 33.1 In order to enable more vehicles to wait at the signal controlled junction to turn left from Winterstoke Road into Ashton Gate Road, it is proposed to extend the left turn lane.
- 33.2 The lane extension is from the current junction south to the edge of the South Bristol Trade Park.
- 33.3 The existing kerb would be set back to create the extended lane with a new area of road surface.
- 33.4 A 3m wide footway/cycleway is proposed.
- 33.5 A low retaining wall would be required at the edge of the South Bristol Trade Park and a small part of the compound to the electricity sub station is required.
- 33.6 The grass verge would be reinstated along with the planting within the trading estate.
- 33.7 Minor highway works are proposed by the level crossing including dropped kerbs and tactile paving at the MetroBus path and the end of the ramp opposite, localised pedestrian guard rails, reinstatement of road markings, and improvements to footpath surfacing.



FIGURES 62: Winterstoke Road Ashton Gate proposal (For further information see drawing 674946.BD.29.01-SK31)







FIGURES 63 - 65: Winterstoke Road Ashton Gate proposal

33.8 It is also proposed to upgrade the Winterstoke Road/Ashton Vale Road traffic signals to operate using Micro-Processor Optimised Vehicle Actuation, or 'MOVA'. This is a highly adaptive and flexible form of signal control that can respond very quickly to changes in traffic volumes.

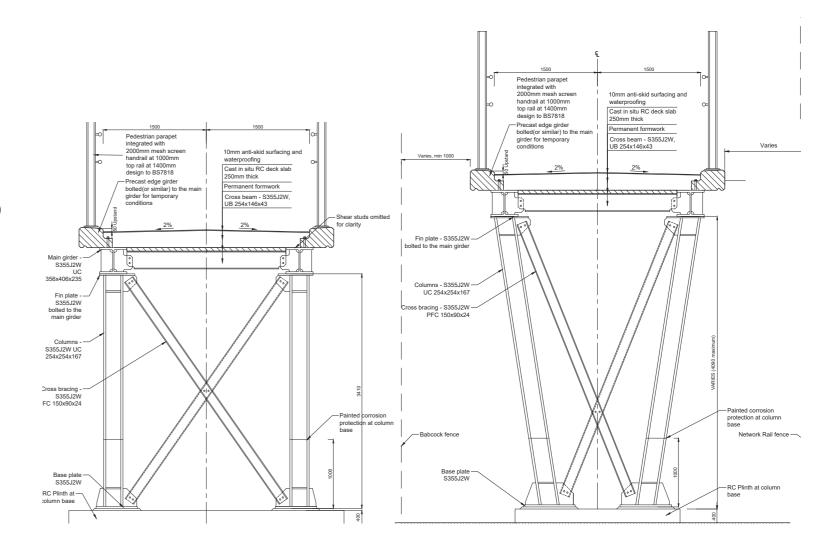
33.9 MOVA continuously monitors traffic flow and carries out costbenefit calculations as to whether to maintain a currently running green or move the green to another approach. It can therefore be configured with higher maximum green time limits compared to the existing Vehicle Actuated system in operation at the site. As such, MOVA will enable a longer green signal to be given, where necessary, to approaches where traffic queues form during a level crossing closure. This will enable the signals to quickly clear any excess queuing minimising delay to drivers passing through the junction.

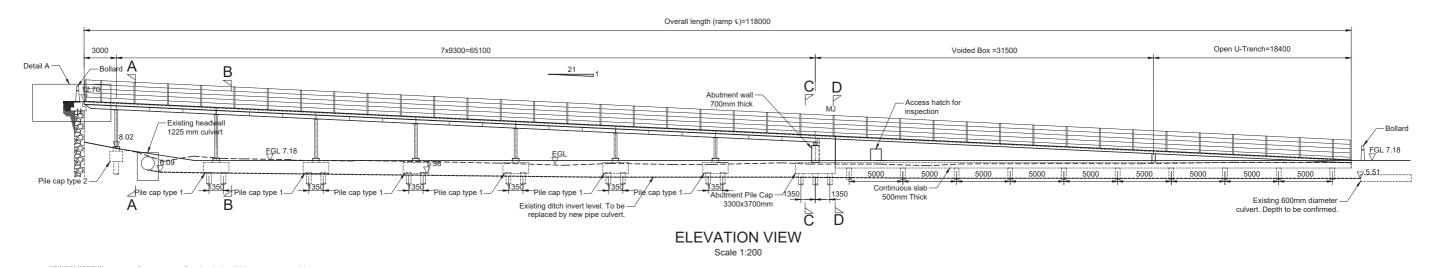
33.10 The upgrade of the junction to MOVA will require a new traffic signal controller, as well as a new detection system comprising loops in the road on all approaches to the junction. As part of this, the traffic signal equipment at the junction will also be renewed

34. Ashton Vale Ramp

- 34.1 A pedestrian and cycle ramp is proposed between Ashton Vale Road and Ashton Road (A370) to provide an alternative access for pedestrians and cyclists during level crossing closures. The ramp is located on a narrow strip on land running parallel to the Portishead Branchline corridor to the east, and Babcock's facility to the west.
- 34.2 The proposed structure consists of a multi-span shared pedestrian and cycle ramp and consists of 2 parts, the approach ramp and the suspended ramp. The approach ramp is an approximately 50 m long concrete ramp which leads up to the abutment of the suspended ramp. The suspended ramp is steel-composite deck integral with steel piers and a concrete abutment. The suspended ramp has 7 spans of 9.3 m and a final cantilevered span of 3.0 m.

- 34.3 The shared footway/cycleway width is 3.0 m wide and the overall width between outer edges of parapet upstands is 3.7 m.
- 34.4 The ramp has a longitudinal gradient of 1:21 for accommodating a change in level from +7.18 m AOD at the South end, to approximately 12.7 m AOD at the North end, where it ties in with the footway on the A370 Ashton Road resulting a total length of 118.0 m.
- 34.5 The end of the ramp aligns with the new path on the south side of Ashton Vale Road recently constructed as part of the MetroBus project which runs alongside the bus route.





FIGURES 66 - 68: Winterstoke Road Ashton Gate proposal (see drawing 674946-CH2-SBR-AVAA-DR-CB-0017)

Appendix

Appendix 1 - From Chapter 6 of the Environmental Statement (2019)

Table 6. DCO sc	3 '	ed policies from the NSDC Core Strategy that are relevent to the
Policy No.	Title	Policy Summary
CS1	Addressing climate change and carbon reduction An overarching policy to encourage implementation of motion to reduce CO2, through design, use of walking, public training and reuse of land.	
CS2	Delivering sustainable design and construction	Requires new development to demonstrate a commitment to sustainable design and construction
CS3	Environmental impacts and flood risk management	An overarching policy aimed at directing developments away from flood plains.
CS4	Nature conservation	Promotes the conservation and enhancement of biodiversity through various measures.
CS5	Landscape and the historic environment	Emphasis on protecting the character, distinctiveness, diversity and quality of North Somerset's landscape and townscape while also conserving the historic environment.
CS9	Green infrastructure	Has the objective of protecting and expanding the provision of green infrastructure throughout North Somerset.
CS10	Transportation and movement	This policy references the reopening of the Portishead to Bristol line for passenger services, which is a priority objective, and outlines the criteria which transport schemes have to fulfil.
CS11	Parking	Requires parking to be provided to meet the needs of the expected users, delivering a balance between good urban design, highway safety, residential amenity and promoting town centre attractiveness and vitality.
CS12	Achieving high quality design and place-making	Seeks to provide high quality buildings and places that should function well, support sustainable land uses and seek to improve the image of the area.

CS20	Supporting a Successful Economy	This policy sets out the aspirations and requirements for future economic development, identifying the quantum of developable employment land available over the plan period along with the general distribution across North Somerset.
CS24	Royal Portbury Dock	Maintain and enhance the role of Royal Portbury Dock. Includes ongoing safeguarding of land at Court House Farm for port uses.
CS26	Supporting healthy living and the provision of health care facilities	Sets out the requirements for Health Impact Assessments of developments and health impacts of developments to the wider community. Point 1 of the policy states that all "large scale developments" require a Health Impact Assessment ("HIA").
CS31	Clevedon, Nailsea and Portishead	Identifies the quantum of development to be delivered in these towns, with particular regard to the delivery of housing and employment land. The policy seeks to prioritise previously developed land and provides support to sustainable transport proposals, emphasising that the re-opening of a rail/rapid transit link from Portishead to Bristol is a particular priority.
CS32	Service Villages	Identifies the service villages and establishes what development will be supported in these locations. In particular, transport proposals are supported where they would increase accessibility by public transport, community transport, cycling and walking.

Appendix 2 - From Chapter 6 of the Environmental Statement (2019)

Management Policies from NSDC	Table 6.2: Summary of adopted policy in the Sites and Policies Plan Part	1: Development
	Management Policies from NSDC	

Manag	Management Policies from NSDC			
Policy No.	Title	Policy Summary		
drainage to ensure that the importance taken into account. SUI alternatives will only be would compromise the		Aims to discourage inappropriate development in flood risk areas and to ensure that the impact of new development on flooding is fully taken into account. SUDs are expected for all major developments; alternatives will only be permitted where SUDs are impractical or would compromise the scheme viability and the alternative does not conflict with national planning policy.		
DM3	Conservation Areas	Seeks to protect conservations areas and their setting from inappropriate development.		
DM4	Listed Buildings	Seeks to protect listed buildings and their setting from inappropriate development.		
DM5 Historic Parks and Gardens Includes provisions to ensure that development proposal adversely affect designated landscape character within including both nationally registered and unregistered His		Includes provisions to ensure that development proposals will not adversely affect designated landscape character within the district including both nationally registered and unregistered Historic Parks and Gardens.		
DM6	Archaeology	Seeks to ensure that new development will not significantly impact on archaeological remains or their setting.		
DM7	Non- designated heritage assets	Seeks to protect non-designated heritage assets and their setting from inappropriate development.		
DM8	Nature Conservation	Seeks to protect and enhance biodiversity, particularly on sites of recognised nature conservation interest. To protect trees, hedges and other landscape features of amenity value and to secure suitable replacements in instances where their loss is justified.		
DM9	Trees and Woodlands	This policy seeks to incorporate existing trees and wooded areas into design proposals where practical and ensure that the planting of new trees is properly designed and adequately maintained in the longer term and recognise the place-making quality of trees.		
DM10	Landscape	Includes provisions to ensure that development proposals will not adversely affect designated landscape character within the district including both nationally registered and unregistered Historic Parks and Gardens. Development will also be required to be carefully integrated into the environment, conserve and enhance vegetation characteristic, respect the historic landscape and include appropriate landscaping and boundary treatments.		
DM12	Development within the Green Belt	Provides detailed guidance in relation to the types of new development which are considered to be not inappropriate development and therefore acceptable in the Green Belt, along with provisions relating to redevelopment of sites on previously developed		
75		land.		

DM19	Green Infrastructure Requires development proposals to contribute to the quality environment, through the creation of high quality well design accessible green infrastructure, which should be provided in the phasing of development and include provisions for maintenance.	
DM21	Motorway Junctions	Provides protection to land at existing motorway junctions for potential future capacity improvements.
DM22	Existing and proposed railway lines	Existing and proposed railway lines will safeguard land for the proposed route.
DM24	Safety, traffic and provision of infrastructure associated with development development will not have an unacceptable impact on highway safety or inhibit necessa for emergency, public transport, service or waste collection Development proposals will need to incorporate measures the impact of development which would give rise to a signing detrimental impact on travel patterns or exacerbates existing transport problems.	
DM25	Public rights of way, pedestrian and cycle access	Seeks to protect and enhance the existing public rights of way network and strategic cycle routes and ensure the provision of new and improved multi-user routes connecting with new developments.
DM28	Parking Standards	Identifies that development proposals should meet the Council's standards for the parking of motor vehicles and bicycles. Where development is not covered by these standards, assessment will be carried out according to individual circumstances with regard being given to the provisions of any submitted Travel Plan.
DM29	Car Parks	Aims to ensure that new development is provided with adequate parking, which meets the needs of intended users and that parking problems are not created or exacerbated in the surrounding area.
DM49	Royal Portbury Dock	Safeguards land for port related uses associated with the Royal Portbury Dock at Court House Farm subject to proposals meeting the criteria set out in the policy. These include the requirement to demonstrate that development would not prejudice proposals for a possible future station and associated parking facilities off Royal Portbury Dock Road associated with the operation of the Portishead to Bristol line.
DM68	Protection of sporting, recreation and community facilities	Protection of existing land and sites and development only allowed where certain conditions apply. Designated community assets shall be retained in community use.

Appendix 3 - From Chapter 6 of the Environmental Statement (2019)

Table 6.3: Summary of adopted policy in the Sites and Policies Plan Part 2: Site Allocations				
Policy Summary No.		Policy Summary		
SA1	Housing Allocations	This policy identifies land that has been safeguarded for future housing development.		
SA2	Settlement Boundaries	This policy defines settlement boundaries around towns and villages, within which development may be acceptable subject to the detailed policies of the Core Strategy, Sites and Policies Plan, Part 1, Development Management Policies and Neighbourhood Plans.		
SA4	Employment Allocations	This policy identifies land that has been safeguarded for future employment development.		
SA5	Local Gren Space	This policy aims to protect amenity areas of public value from unacceptable harm or loss.		

Appendix 4 - From Chapter 6 of the Environmental Statement (2019)

Table 6.	4: Summary of adopted po	olicy from the Bristol Core Strategy
Policy No.	Title	Policy Summary
BCS1	South Bristol	Strategic policy which has the overall objective to regenerate south Bristol and focus development within the existing built up area connected by high quality transport networks.
BCS2	Bristol City Centre	Establishes the quantum and type of development that will be supported within the city centre, including improvements to transport systems and connectivity, such as new public transport, pedestrian and cycling routes and transport hubs.
BCS6	Green Belt	This policy indicates the broad extent of the Green Belt within Bristol and the approach to development within it, following the principles set out in national planning policy.
BCS8	Delivering a thriving economy	Sets out the quantum and distribution of employment land that will be supported across the City, with a particular focus for future economic development in the city centre and to the south of Bristol, including within major regeneration areas in South Bristol.
BCS9	Green Infrastructure	The City Council aims to increase the connectivity of the strategic green infrastructure network, retain and prevent its loss.
BCS10	Transport and Access Improvements	This policy confirms the support for the reopening of the Portishead to Bristol Rail Line.
BCS11	Infrastructure and Developer Contributions	Requires development to contribute towards the provision of measures to directly mitigate its impact and infrastructure, facilities and services required to support the growth of the City.
BCS13	Climate Change	Requires the impact from development on climate change to be taken into account and requires development to mitigate its impact on climate change and adapt to the effects of climate change, such as through measures that include the efficient use of natural resources in construction.
BCS15	Sustainable Design and Construction	This policy aims to ensure that new developments minimise their environmental impact and emissions of CO2. "Sustainable design and construction will be integral to new development in Bristol. In delivering sustainable design and construction, development should address the following key issues: waste and recycling during construction and in operation; conserving water resources; the type, life cycle and source of materials to be used; and flexibility and adaptability, allowing future modification of use or layout, facilitating future refurbishment and retrofitting."

BCS16	Flood Risk and Water Management	This policy sets out the Council's approach to minimising the risk and impact of flooding in the context of new development. All development will be expected to incorporate measures to reduce surface water runoff, including the use of SUDs, to ensure flood risk is not increased elsewhere.
BCS21	Quality Urban Design	Requires new development to deliver high quality urban design and contribute positively to an area's character and identity.
BCS22	Conservation and the Historic Environment	This policy seeks to protect heritage assets and their character and setting from inappropriate development, giving specific regard to: scheduled ancient monuments; historic buildings; historic parks and gardens; conservation areas; and archaeological remains.
BCS23	Pollution	Requires development to be sited and designed so as to maintain environmental amenity with regards to noise, dust, vibration, and odour, and to prevent pollution and contamination of air, land and water.

Appendix 5 - From Chapter 6 of the Environmental Statement (2019) Summary of adopted policy in the Site Allocations and Development Management Policies document

Table 6.5: Summary of adopted policy in the Site Allocations and Development Management Policies Document (BCC)					
Policy No.	Title	Policy Summary			
DM1	Presumption in favour of sustainable development	Policy reflects the core planning principles set out in the NPPF that a positive approach will be taken that reflects the presumption in favour of sustainable development. Planning applications that accord with the policies in the Local Plan will be approved without delay, unless material considerations indicate otherwise.			
DM13	Development proposals on Principal Industrial and Warehousing Areas	The policy identifies that sites are to be retained for industrial and warehousing uses and seeks to protect these sites from inappropriate alternative uses.			
DM14	The Health Impacts of Development	Requires development to contribute towards reducing the causes of ill health, improving health and reducing health inequalities. Developments that will have an unacceptable impact on health and wellbeing will not be permitted.			
DM15	Green Infrastructure Provision	States that the provision of additional and/or improved management of existing trees will be expected as part of the landscape treatment of new development.			
DM17	Development Involving Existing Green Infrastructure	The Core Strategy seeks to conserve existing green infrastructure assets. This policy sets out the detailed approach to this where further detail to support the Core Strategy is required.			
DM19	Development and Nature Conservation	Seeks to ensure that consideration is given to the likely impact that development could have upon habitat, species or features, which contribute to nature conservation in Bristol, and that appropriate mitigation is provided where such impacts would occur.			
DM20	Regionally Important Geological Sites	Seeks to protect and conserve RIGS.			
DM23	Transport Development Management	This policy sets out the transport and traffic considerations that development proposals should address, including parking standards for non-residential development. It also seeks to ensure that new development is accessible by sustainable transport methods such as walking, cycling and public transport.			

DM24	Transport Schemes	The policy details a number of infrastructure projects, including rapid transit schemes and rail, Park and Ride and highway improvements. These proposals reflect the schemes set out in the West of England Partnership's Joint Local Transport Plan 3 (2011-2026) and the purpose of the policy is to safeguard land required for the implementation of these schemes, which includes safeguarding railway sites and associated land for passenger and rail freight purposes.
DM25	Greenways	The policy sets out how development proposals should facilitate and, where possible, improve access to the network of 'Greenways' in and around Bristol.
DM26	Local Character and Distinctiveness	This policy requires development to contribute towards local character and distinctiveness by responding to existing land forms, green infrastructure and historic assets, and retaining and enhancing important existing views.
DM27	Layout and Form	This policy requires the layout and form of new development and landscapes to contribute towards the creation of quality urban design.
DM31	Heritage Assets	The policy identifies that development that has an impact upon a heritage asset will be expected to conserve and, where appropriate, enhance the asset or its setting.
DM33	Pollution Control, Air Quality and Water Quality	Seeks to ensure that development will not unacceptably impact on environmental amenity, air quality or water quality as a consequence of pollution emanating from new developments.
DM34	Contaminated Land	Requires development to demonstrate that it will not contaminate land and that where existing contamination exists appropriate mitigation will be implemented to ensure that there will be no unacceptable risk to the site or its surroundings.
DM35	Noise Mitigation	This policy identifies that development that would have an unacceptable impact on environmental amenity or biodiversity by reason of noise will be expected to provide an appropriate scheme of mitigation.
DM37	Unstable Land	This policy sets out detailed requirements where unstable land is suspected and / or there is the risk of instability. It identifies that where remediation measures are necessary, conditions or obligations may be applied to ensure that the development does not take place until appropriate works are completed.
SA1	Site Allocations	This policy allocates specific sites for development and identifies the type of development considered appropriate for the site.