

Ashley Down Railway Station

Transport Statement

West of England Combined Authority (WECA)

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Quality information

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1. Introduction

1.1 Introduction

1.1.1 AECOM was commissioned by the West of England Combined Authority (WECA) to provide transport planning inputs to a Prior Approval Submission for the re-opening of Ashley Down railway station in Bristol. This proposal forms part of the MetroWest Phase 2 project which will re-open the Henbury railway line to passenger services with new railway stations at Ashley Down, North Filton and Henbury. Ashley Down railway station will be located adjacent to Station Road in the Ashley Down area of Bristol, which historically benefitted from the previous station that was closed in 1964. The location of the site and its context to surrounding environs is shown in **Figure 1.1**.

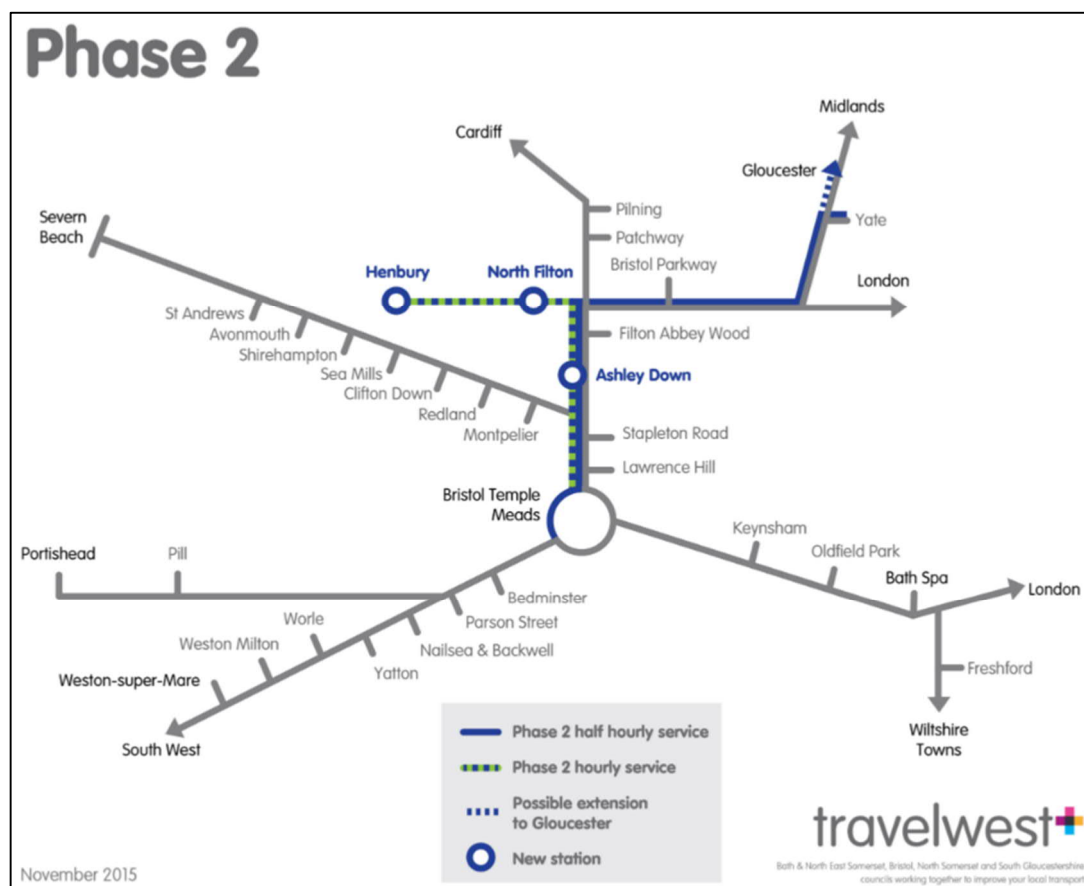
1.1.2 This Transport Statement (TS) has been prepared to assess the proposals from a transport perspective across both construction and operational phases of the development. The proposals have been developed to “Approval in Principle” stage by Network Rail and as such this TS benefits from a significant catalogue of background assessment and information, which is cited where relevant. Site visits were undertaken by AECOM staff in July 2020 to develop an in-depth understanding of the development site location and local area.

1.1.3 An initial Transport Note was prepared by AECOM in July 2020 for the purposes of a public engagement and stakeholder engagement exercise. This is expanded upon in this TS, with further details in regard to the development proposals, and analysis of construction and operational impact, where possible.

1.2 Overview of Development Proposals

1.2.1 The MetroWest Phase 2 project proposes to re-open the Henbury railway line to an hourly spur passenger service and increase rail services to Yate and Gloucester to a half-hourly frequency. The plans include new stations at Henbury, North Filton and Ashley Down. **Figure 1.2** shows a map of the proposed MetroWest Phase 2 network. The MetroWest proposals are running parallel to other significant local rail improvements in Bristol as part of an overarching plan to increase the capacity, flexibility and resilience of the network. This includes the Filton Bank Four Tracking project, which has been delivered.

Figure 1.2: MetroWest Phase 2 Network Map



1.2.2 The proposed Ashley Down station will be located adjacent to Station Road in the Ashley Down area of Bristol. The station will be positioned on the Bristol and South Wales Union (BSW) relief lines which follows the configuration delivered through the Filton Bank Four Tracking, where the BSW main lines are to the east and relief lines are to the west. The proposals for the station have been developed to “Approval in Principle” stage by Network Rail with the station being a Category F standard (i.e. unstaffed, <0.25 million annual passengers).

1.3 Report Structure

1.3.1 The remainder of this report is structured as follows:

- **Chapter 2: Planning Policy Review**, sets out a summary of the relevant transport planning policies relevant to the proposed development at a national, regional and local level;
- **Chapter 3: Existing Site and Accessibility**, provides a summary of the site location and existing use, local highway network and accessibility via walking, cycling and public transport modes;
- **Chapter 4: Development Proposals**, describes the development proposed at the site, including the access strategy, internal layout and parking strategy;
- **Chapter 5: Construction Traffic Impact Assessment**, provides an appraisal of the likely impact of the construction phase on local transport conditions;
- **Chapter 6: Operational Traffic Impact Assessment**, sets out an initial overview of the likely operational impact of the development proposals; and
- **Chapter 7: Conclusions.**

2. Planning Policy Review

2.1 Introduction

- 2.1.1 This chapter of the TS provides a review of the existing planning and transport policies relevant to the proposed development at a national, regional and local level.

2.2 National Policy

National Planning Policy Framework (NPPF)

- 2.2.1 The latest version of the National Planning Policy Framework (NPPF) was published in February 2019, replacing two previous versions of the document published in 2012 and 2018 respectively. The NPPF sets out the government's planning policies for England and explains how these are expected to be applied at a local level. It provides a framework within which locally prepared plans for housing and other development can be produced.
- 2.2.2 Section 9 of the NPPF explains the importance of promoting sustainable transport through the planning system.
- 2.2.3 Paragraph 102 considers the opportunities of sustainable travel to address the impacts of proposed development and to reduce the wider environmental impacts of traffic and transport infrastructure as a whole. It is important that transport issues are considered at *"the earliest stages of plan-making and development proposals"*.
- 2.2.4 Paragraph 103 emphasises the role that sustainable travel infrastructure can have in unlocking significant development opportunities.
- 2.2.5 Paragraphs 104 to 107 provides detail regarding how planning policy can encourage and facilitate sustainable transport. It is recognised that aligning the formation of development plans and policies with the strategies and investments of local highway authorities and transport infrastructure providers / operators is crucial in achieving sustainable development. This is particularly important for any *"large scale transport facilities"* which should be integrated into plan-making at a strategic level.
- 2.2.6 Paragraphs 108 to 111 provides a framework in which decisions should be made regarding new development proposals from a sustainable transport perspective. Ultimately, development proposals should confirm that all opportunities for sustainable travel have been taken up and that the cumulative traffic impacts of the proposals are demonstrated to be acceptable (through the production of a Transport Assessment or Statement). Those developments which are expected to generate significant amounts of movement will be required to produce a Travel Plan, the aim of which is to reduce private car use for travel associated with the development in favour of more sustainable forms of travel.
- 2.2.7 The proposed development is evidently a significant piece of transport infrastructure that has been coordinated at a strategic level between relevant partners. It will embed a new form of sustainable travel in the local area, to the benefit of existing residents and businesses as well as having the potential to unlock new development sites in the area. On this basis it is considered that the development proposals align with planning and transport policy at a national level.

2.3 Regional Policy

Joint Local Transport Plan 4 (2020 – 2036)

- 2.3.1 The Joint Local Transport Plan (JLTP) 4 was adopted in March 2020 and covers the period from 2020 to 2036. This document outlines the approach to transport and covers the general aims and objectives for the transport system in the context of existing and emerging national policies for the West of England partnership area, which comprises the unitary authorities of Bristol, Bath and North East Somerset, North Somerset and South Gloucestershire.
- 2.3.2 The vision of the JLTP 4 is: *"connecting people and places for a vibrant, inclusive and carbon neutral West of England"*. Five objectives are outlined to achieve this vision:

- Take action against climate change and address poor air quality;
- Support sustainable and inclusive economic growth;
- Enable equality and improve accessibility;
- Contribute to better health, wellbeing, safety and security; and
- Create better places.

2.3.3 The JLTP 4 outlines the issues and opportunities for connectivity across four spatial levels: “*outside the West of England*”, “*within the West of England*”, “*local*” and “*neighbourhood*”. Each of these spatial levels are discussed between Section 6 and Section 9 of the JLTP 4, summarised in the following paragraphs.

2.3.4 Policy W1 is to “*provide more public transport options and improve service quality*”. The proposed development is referenced in Policy W1 as part of the new stations package included in MetroWest phases 1 and 2.

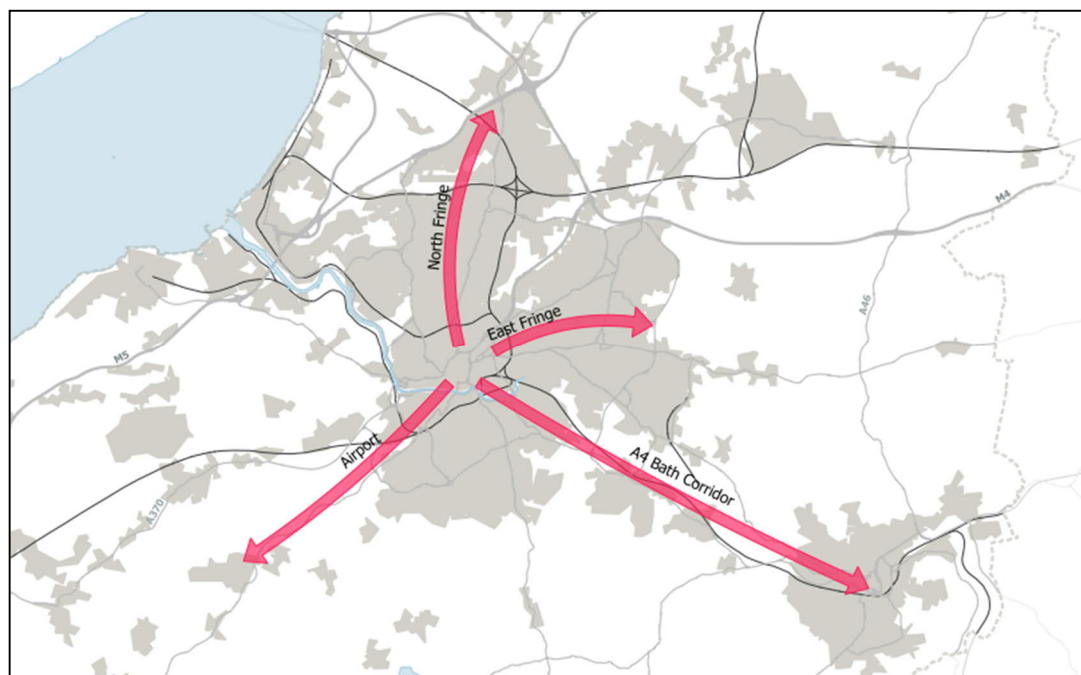
2.3.5 Policy L1 (Enable walking and cycling ‘active modes of travel’ to be the preferred choice for shorter journeys) JLTP4 promotes development of the *Local Cycling and Walking Infrastructure Plan* which will incorporate the Greater Bristol Cycle Network (GBCN). The GBCN comprises key corridors, orbital and cross city routes as outlined in *Bristol Cycle Strategy*. The proposed development will integrate with walking and cycling modes and as such has the potential to act as a catalyst for investment in new infrastructure and to connect existing and planned sustainable transport networks.

2.3.6 Policy N1 (Use master planning and local design to create better places) outlines that the JLTP4 will encourage new developments in locations that are accessible by existing walking, cycling and public transport networks, and discourage proposals that fail to actively encourage mode shift away from the private car. The proposed development could serve to unlock new development in the local area through improving the sustainable accessibility of potential development sites. The close proximity of a significant piece of sustainable transport infrastructure (i.e. the proposed railway station) can encourage developers to capitalise on this link through providing on-site measures (and contributing to off-site measures) that will facilitate sustainable trips.

Major Schemes

2.3.7 Section 11 of the JLTP 4 outlines the major transport schemes proposed for the plan period (2020-2036). It identifies that a “step-change” in investment will be required to deliver all measures outlined in the plan and therefore delivery will depend on the release of funding. Mass Transit is identified as a “transformational” scheme. The proposals are for Mass Transit Schemes for key public transport corridors which currently, or forecast to, receive large passenger demand. This includes the Bristol City Centre to North Fringe corridor. The Mass Transit Scheme corridors are outlined in **Figure 2.1**.

Figure 2.1: Mass Transit Scheme Corridors in JLTP 4



Source: West of England Joint Local Transport Plan (2020-2036).

2.3.8 Again, the proposed development is referenced as part of MetroWest phases 1 and 2, and is therefore considered strategically important from a transport perspective. The proposals will integrate with the delivery of complementary schemes that include:

- Local Bus Package (GBBN 2) – improvements to bus services;
- Bristol Walking and Cycling Package, including the GBCN which indicates that Lockleaze would be connected by Route F13 'Northern Loop Orbital' and Route Q2 'Concorde Way'. Route QF13 is proposed as a "freeway", a direct and continuous route on main roads with extensive segregation. This would link Lockleaze with Henbury, Brentry, Southmead Hospital, UWE Frenchay Campus, Downend, Staple Hill, Kingswood, and Hanham; and
- The Lockleaze Transport Package, which comprises the Muller Road Transport Improvements and accessible pathways through Stoke Park Estate to cater for development. This will have future walking and public transport benefits to the site.

2.4 Local Policy

Bristol City Council Local Plan

2.4.1 The Bristol City Council (BCC) Local Plan sets out the policies and proposals to guide future development in Bristol up to 2026. In total, the plan comprises seven parts; the relevant sections for the purposes of this review are as follows:

- i. *Core Strategy* – Adopted in June 2011, this sets out the overall approach for planning in Bristol; and
- ii. *Site Allocations and Development Management Policies* – Adopted in July 2014, this contains policies for specific development sites and sites that should be protected from development, as well as general policies to ensure development in Bristol is good quality.

2.4.2 These are reviewed in the following sub-sections.

Core Strategy

2.4.3 Paragraph 3.2 sets out the aims of the *Core Strategy*, which seeks to deliver:

- A prosperous, cohesive and sustainable city, a regional and green capital which is a great place to live;
- A safe and healthy city made up of thriving neighbourhoods with a high quality of life;
- A city with sustainable economic and housing growth;
- An accessible and digitally connected city with a transport system which meets its needs; and
- A city which reduces its carbon emissions and addresses the challenges of climate change.

2.4.4 Paragraph 3.4 outlines some of the objectives contributing towards the overall spatial vision of the *Core Strategy*. Several objectives are relevant to the proposed development including:

- Mixed, balanced and sustainable communities – ensure easy access by walking and cycling to local community and health services, shops, culture and leisure facilities, employment, education and skills training;
- High quality built environment – provide highly attractive and safe places, with a high quality well designed built environment; and
- Improved accessibility and connectivity – improved accessibility and connectivity to and between centres and within the city, to key services and places of work and recreation, with improved quality of life, for residents, businesses and visitors alike. Residents and workers will have a reduced need to travel. Congestion will be managed, public transport and walking and cycling provision improved and streets, pedestrian areas and spaces will be safe.

2.4.5 Policy BCS10 provides a commitment of BCC to “*support the delivery of significant improvements to transport infrastructure to provide an integrated transport system, which improves accessibility within Bristol and supports the proposed levels of development*” outlined in the Local Plan. This includes “*new rail stations, for example at Portway Park and Ride, Ashton Vale and Ashley Hill*”. The supporting text highlights the important role of public transport in facilitating a significant shift in travel behaviours away from the private car. In particular, the MetroWest project is referenced with an aspiration to deliver an enhanced local rail network of half-hourly cross-city services into and across the West of England.

Site Allocations and Development Management Policies

2.4.6 Policy DM23 (Transport Development Management) states that “*development should not give rise to unacceptable traffic conditions*”. In addition, development is expected to provide the following:

- Safe and adequate access for all within the development and onto the highway network;
- Access and, where necessary, improvements to public transport;
- Measures to mitigate unsatisfactory transport conditions created or exacerbated by the development;
- Enhancements to the pedestrian and cycle network, where appropriate;
- Protection and enhancement of public rights of way, with diversions only where an alternative route of equal or improved character, amenity, safety, directness and convenience is provided; and
- Appropriate level of parking provision and servicing arrangements.

2.4.7 The policy also requires proposals should be supported by an appropriate level of transport assessment.

2.4.8 Policy DM24 (Transport Schemes) is intended “*to safeguard land required for the implementation of those proposals which have land use implications. The policy also proposes to safeguard railway sites and associated land for passenger and rail freight purposes*”. This covers the proposed development.

2.5 Summary

- 2.5.1 This chapter of the TS has reviewed relevant transport planning policies for the proposed development at a national, local and regional level. The scheme proposals are considered to align with planning policy.

3. Existing Situation and Site Accessibility

3.1 Introduction

- 3.1.1 This chapter of the TS provides a description of the site location and existing situation, the surrounding highway network, the accessibility of the proposed station for non-car modes of travel and the proximity of the premises to local services, facilities and employers. This chapter also refers to planned improvements to the local sustainable travel network that are being delivered separately to the proposed development and will serve to improve access to the site.
- 3.1.2 In line with prevailing Covid-19 restrictions, a “socially-distanced” site visit was undertaken by AECOM staff in July 2020 to inform the study.

3.2 Site Location

- 3.2.1 The proposed railway station will be located adjacent to Station Road in the Ashley Down area of Bristol, which historically benefitted from the previous station that was closed in 1964. The station will be positioned on the BSW relief lines which follows the configuration delivered through the Filton Bank Four Tracking, where the BSW main lines are to the east and relief lines are to the west. At this location, the railway line routes in a north-south alignment, with Station Lane to the east and Station Road to the west. Concorde Way, a strategic walking and cycling route (described further below), runs roughly parallel to the railway line on the western side.
- 3.2.2 The location of the site and its context to surrounding environs is shown in **Figure 1.1**.

3.3 Local Highway Network

- 3.3.1 The site is located between Station Lane (to the east) and Station Road (to the west). A subway provides pedestrian access between the two lanes.
- 3.3.2 Station Lane is a minor road which runs from Muller Road and currently provides access to Fairfield High School Playing Fields and other properties and private land. Station Lane forms the fourth arm to a signalised junction on Muller Road with Shaldon Road. Station Lane is between 3m and 4m in width for much of its extent, and therefore will only accommodate one-way vehicle traffic. There are no passing places. Station Lane is shown at **Figure 3.1**. Adjacent to the railway line, Station Lane opens into a large area of hardstanding. Access to the railway line is provided for authorised vehicles via a gated, ramped access. This is shown at **Figure 3.2**. Station Lane also connects a pedestrian route from Muller Road to the western side of the railway line via a subway.

Figure 3.1 (Left): Station Lane and Figure 3.2 (Right): Hardstanding off Station Lane



Source: AECOM (July 2020).

- 3.3.3 Station Road is a residential road that runs adjacent to the site. It meets Ashley Down Road to the east and forms a cul-de-sac; although it does provide access to Ashgrove Road and Lilstock Avenue (there is no-through traffic on Lilstock Avenue; however, there is pedestrian/ cycle access between Lilstock Avenue and Dirac Road). On-street parking is unrestricted on Station Road and vehicles parked on both sides of the road reduce its ability to accommodate two-way vehicle movement. Adjacent to the site, Station Road widens; however, there remains a significant on-street parking presence. This is shown at **Figure 3.3**.

Figure 3.3: Station Road On-Street Parking



Source: AECOM (July 2020).

- 3.3.4 Double yellow lines are positioned where a shared footway / cycleway meets Station Road at two points, shown at **Figures 3.4** and **3.5**. Vehicle access is restricted to the footway / cycleway, which lies flush with the highway, by way of removable bollards. This facilitates maintenance access to Concorde Way.

Figure 3.4 (Left) and Figure 3.5 (Right): Pedestrian / Cycle Access from Station Road



Source: AECOM (July 2020).

- 3.3.5 Muller Road provides access to the M32 motorway (Junction 2) around 1km to the east of the development site. The M32 provides a strategic route for motorised traffic into Bristol from the north, connecting to the M4 motorway to the north of the city. Both Muller Road and Ashley Down Road meet Gloucester Road (A38) to the west of the development site. Gloucester Road is another key route that provides access to the north of Bristol, including Filton and the M5 motorway.

3.4 Walking and Cycling

Existing Situation

- 3.4.1 The development site is conveniently located alongside Concorde Way, which runs roughly adjacent to the western side of the railway line. This is shown at **Figure 3.6**. Concorde Way is a strategic walking and cycling route in Bristol that connects the City Centre with the Bristol Northern Fringe via designated and largely traffic-free shared paths.

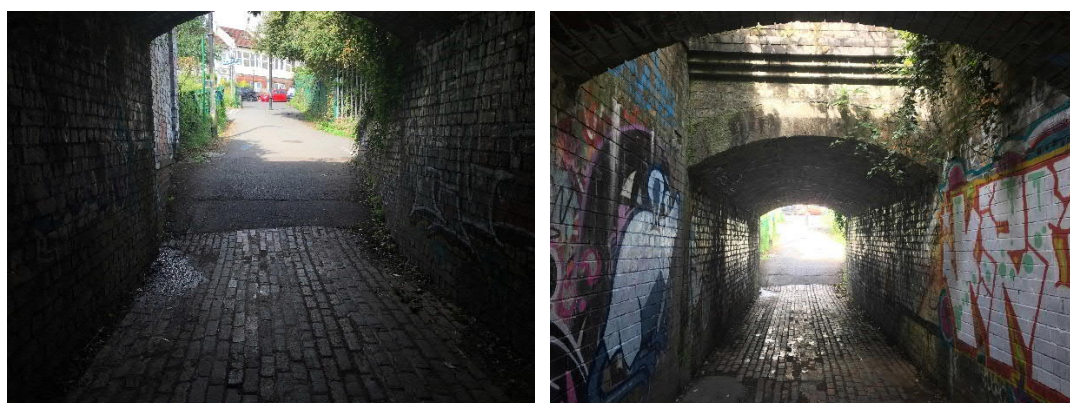
Figure 3.6: Concorde Way



Source: AECOM (July 2020).

- 3.4.2 In the vicinity of the site, there is an opportunity to access / egress from Concorde Way via Station Road or Station Lane (using the subway), although current links from Station Road to Concorde Way are not Equality Act 2010 compliant. There is no corresponding dedicated cycle provision on Station Road, but signage is provided to direct cyclists towards Gloucestershire County Cricket Ground using cycle-friendly routes (via Ashley Down Road).
- 3.4.3 Station Lane primarily functions as a pedestrian route and as access for organisations / residents of Station Lane. At Muller Road, there is limited dedicated cycle provision. However, where Concorde Way meets Muller Road (approximately 150m to the north of Station Lane) a short section of demarcated cycle lane is provided to form a continuation of the cycle route, which then diverts onto Petherbridge Way and subsequently Dovercourt Road.
- 3.4.4 In terms of pedestrian provision, all local roads to the site include footways and formal crossing facilities are provided at intermittent locations on main roads. Concorde Way, being a strategic route for walking and cycling, is also an attractive route for pedestrians, being mostly traffic-free and at a relatively shallow gradient.
- 3.4.5 Station Road is positioned on a fairly steep gradient from Ashley Down Road and this could present a barrier to walking to and from the site for some people. There is a noticeable level difference between Station Road and Station Lane via the footway and subway, which is not compliant for disabled users. However, as part of the proposals the route between Station Road and the subway will be re-graded. Whilst subways can be perceived as being unsafe, in this location the subway is relatively short (around 20m in length) and therefore pedestrians are able to clearly see through it. A gap in the subway provides natural light. There is no artificial lighting within the subway itself, although artificial street lighting is provided at the eastern extent. The subway is shown at **Figures 3.7** and **3.8**.

Figure 3.7 (Left): Steep gradient towards Station Road and Figure 3.8 (Right): Subway looking towards Station Road



Source: AECOM (July 2020)

- 3.4.6 Station Lane, which is a Public Right of Way, is conducive to pedestrian movement and connects with Muller Road, which has a good provision of pedestrian facilities. Street lighting is provided along the extent of Station Lane; however, there is limited natural surveillance with mature verge and an industrial unit abutting the lane. At Muller Road, signalised pedestrian crossings are incorporated into the northern and eastern arms of the junction with Shaldon Road.

Planned Improvements

- 3.4.7 Highway improvement measures are planned for Muller Road in the vicinity of the site. These are proposed to help mitigate impacts of new residential development planned for the Lockleaze area. The improvements are part of the 'Lockleaze Transport Package' as outlined in the *Draft Joint Local Transport Plan 4* (JLTP4). These are referred to as the 'Muller Road Transport Improvements' throughout this TS.
- 3.4.8 These proposed improvements, of which the final approved scheme will be subject to change following public engagement or statutory consultation, are expected to enhance the attractiveness of public transport use for users of the surrounding area and improve the existing walking / cycling environment. As of February 2020, the Muller Road Transport Improvements have been approved by the West of England Combined Authority (WECA) and granted funding. Works to deliver improvements is expected to start in 2021.

3.5 Public Transport

Bus

- 3.5.1 The closest bus stops to the proposed station are located on Ashley Down Road and Muller Road. These bus stops are less than 400m from the site, which is considered accessible in terms of Chartered Institution of Highways and Transportation guidance (Guidelines for Planning for Public Transport in Developments, 1999). The stops benefit from shelters, seating and Real-Time Passenger Information (RTPI), and are indicated on **Figure 3.9**.
- 3.5.2 The Ashley Down Road bus stops ("Sefton Park Road") are served by bus service 70. The Muller Road bus stops ("Elmcroft Crescent") are served by bus services 17, 24 and 506. **Table 3.1** provides a summary of the timetable information for each bus stop (N.B. due to the ongoing Covid-19 pandemic, buses may be operating at a reduced frequency).

Table 3.1: Bus Timetable Information**Sefton Park Road**

Service	Route	Day	First Service	Last Service	Approximate Frequency
70	City Centre – UWE Frenchay Campus	Mon-Fri	04:45	03:45	15 minutes
		Sat-Sun	04:45	03:45	20 minutes
	UWE Frenchay Campus – City Centre	Mon-Fri	04:10	03:10	15 minutes
		Sat-Sun	04:10	03:10	20 minutes

Elmcroft Crescent

Service	Route	Day	First Service	Last Service	Approximate Frequency
17	Southmead Hospital – Keynsham	Mon-Fri	06:39	23:29	30 minutes
		Sat-Sun	06:44	20:44	1 hour
	Keynsham – Southmead Hospital	Mon-Fri	06:16	23:15	30 minutes
		Sat-Sun	06:09	20:13	1 hour
24	Southmead Hospital – Ashton Vale	Mon-Fri	05:34	23:29	10 minutes
		Sat-Sun	06:14	23:29	20 minutes
	Ashton Vale – Southmead Hospital	Mon-Fri	06:27	00:02	10 minutes
		Sat-Sun	06:29	00:02	20 minutes
506	Broadmead – Southmead Hospital	Mon-Fri	07:24	19:43	30 minutes
		Sat	07:37	19:05	30 minutes
	Southmead Hospital – Broadmead	Mon-Fri	07:12	19:20	30 minutes
		Sat	07:09	18:50	30 minutes

Source: FirstGroup (times shown for (1) service 70 are for Lockleaze Road (2) service 17 are for Horfield Common (3) service 24 are for Gainsborough Square), Bristol Community Transport (times shown for service 506 are for Downend Road / Horfield Common). Timetables correct as of July 2020.

- 3.5.3 The timetable information demonstrates that there is an opportunity to promote interchange between bus and rail, with a good range of bus services at regular frequencies which serve a significant catchment for residential, employment and services in the locality.

3.6 Existing Parking Supply

- 3.6.1 The site is located adjacent to residential areas, containing varying levels of on-street parking provision. It is recognised that, given the proximity to associated parking, there is potential that future rail passengers could potentially park in neighbouring streets and walk the remaining distance to the station. However, as discussed at **Chapter 6**, this demand is likely to be minimal given the nature of rail trips envisaged from the proposed station, the proximity of the station to a strategic walking and cycling route (Concorde Way) and with consideration to mode share forecasts.
- 3.6.2 For the purposes of this analysis, a maximum walking distance of 400m is assumed for any passenger walking between their parked car and the proposed railway station, identified with consideration to various published guidelines on appropriate walking distances. A large proportion of the parking supply in close proximity to the site is unrestricted, with numerous opportunities for on-street parking in the area. The parking restrictions in the study area are summarised in **Table 3.2** and shown on **Figure 3.10**.

Figure 3.10: Existing Parking Restrictions

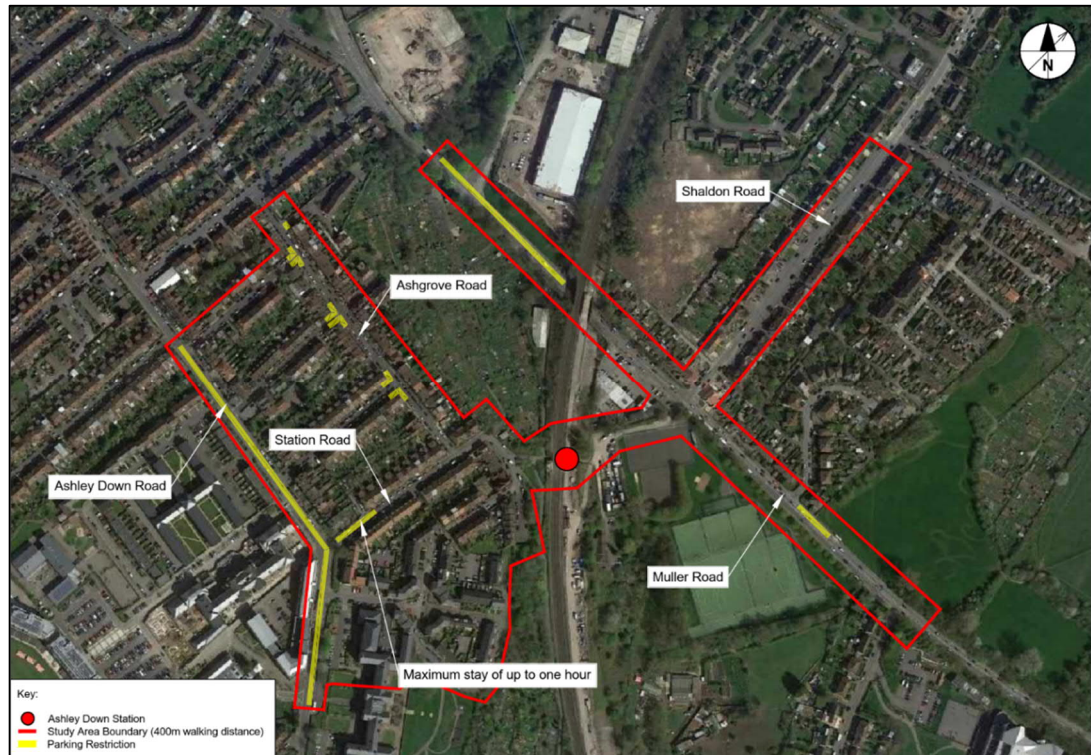


Table 3.10: Summary of Parking Restrictions

Road	Restriction
Muller Road	There are double yellow lines present on Muller Road, located adjacent to bus stops. North of the railway line, there are double yellow lines present.
Shaldon Road	There are currently no restrictions in place. However, there are numerous driveway accesses, which deter on-street parking by vehicles not associated with the adjacent properties. The Muller Road Transport Improvements propose (subject to change) single yellow line restrictions (parking or waiting restrictions during certain hours of the day) on both sides of the carriageway (double yellow lines at junction with Muller Road), therefore deterring use for parking purposes.
Station Road	Towards the western extent of Station Road, there are double yellow lines present, indicating a maximum stay of up to one hour, and no return within one hour.
Ashgrove Road	Double yellow lines are in place within the vicinity of minor road junctions along Ashgrove Road. This includes junctions with York Avenue, Ashgrove Avenue, Talgarth Road and Ashgrove Place. Parking on Ashgrove Place is restricted to residents only.
Ashley Down Road	There are double yellow lines present on Ashley Down Road, with restrictions on parking at all times.

3.6.3 The review has identified that, with the Muller Road Transport Improvements (which is subject to change prior to a scheme being approved), opportunities for on-street parking in the area neighbouring the site will be primarily within the residential roads to the west of the site, namely Station Road and Ashgrove Road (and associated side streets), where there are limited restrictions. Local residents will be using some of the available supply and therefore any parking opportunities for users of the rail network will be constrained during certain times of the day. However, as discussed at **Chapter 6**, demand for on-street parking from the proposed railway station is likely to be minimal given the nature of rail trips envisaged from the proposed station and with consideration to mode share forecasts.

3.7 Local Facilities

- 3.7.1 The proposed railway station will be set in a predominantly residential area that also has excellent access to key services and amenities. It is therefore likely that the proposed station will be utilised for a number of trip purposes. **Table 3.2** provides a summary of the key facilities that are located within a reasonable distance of the development site. These are also shown on **Figure 3.9**.

Table 3.2: Local Trip Generators / Attractors

Land Use	Description	Distance from Site	Approximate Walking Time	Approximate Cycling Time
Education	City of Bristol College (Ashley Down Centre)	450m	6 minutes	4 minutes
	Fairfield High School	800m	11 minutes	5 minutes
Leisure	St Werburghs Farm	650m	7 minutes	2 minutes
	Gloucestershire Cricket (Bristol County Ground)	1.3km	17 minutes	6 minutes
	Memorial Stadium	1.5km	20 minutes	7 minutes
Retail	Aldi (Petherbridge Way)	350m	4 minutes	2 minutes
	Lidl (Muller Road)	450m	6 minutes	2 minutes

- 3.7.2 In addition to the facilities listed in **Table 3.2**, the site is also located within 2km of a range of services available on Gloucester Road. Many of the services listed are also major employers in the local area, indicating that the proposed station could cater for a number of inbound (as well as outbound) commuter trips. Other significant employers such as Southmead Hospital are located slightly over 2km away, with **Table 3.1** highlighting the potential for combined bus and rail trips to access such destinations, and for the removal of vehicle trips from the network.

3.8 Summary

- 3.8.1 The proposed railway station will be located adjacent to Station Road in the Ashley Down area of Bristol. At this location, the railway line routes in a north-south alignment, with Station Lane to the east and Station Road to the west. Concorde Way, a strategic walking and cycling route, runs roughly parallel to the railway line on the western side.
- 3.8.2 The local highway network includes Station Lane, Station Road and Muller Road. Station Lane is a minor road which runs from Muller Road and currently provides access to Fairfield High School Playing Fields and other properties and private land. Station Lane also connects a pedestrian route from Muller Road to the western side of the railway line via a subway. Station Road is a residential road that runs adjacent to the site. It meets Ashley Down Road to the east and forms a cul-de-sac. Muller Road provides access to the M32 motorway (Junction 2) around 1km to the east of the development site. The M32 provides a strategic route for motorised traffic into Bristol from the north, connecting to the M4 motorway to the north of the city. Both Muller Road and Ashley Down Road meet Gloucester Road (A38) to the west of the development site. Gloucester Road is another key route that provides access to the north of Bristol, including Filton and the M5 motorway.
- 3.8.3 The development site is conveniently located alongside Concorde Way, a strategic walking and cycling route in Bristol that connects the City Centre with the Bristol Northern Fringe via designated and largely traffic-free shared paths. Station Lane primarily functions as a pedestrian route and as access for organisations / residents of Station Lane. In terms of pedestrian provision, all local roads to the site include footways and formal crossing facilities are provided at intermittent locations on main roads. Concorde Way is an attractive route for pedestrians, being mostly traffic-free and at a relatively shallow gradient. Station Lane is conducive to pedestrian movement and connects with a good level of provision on Muller Road. A transport improvement scheme is proposed for Muller Road (Muller Road Transport Improvements) which is expected to enhance the attractiveness of walking, cycling and public transport.
- 3.8.4 The closest bus stops to the development site are located on Ashley Down Road and Muller Road, and are served by bus services 70, 17, 24 and 506. The timetable information demonstrates that there is an opportunity to promote interchange between bus and rail, with a good range of bus services at regular frequencies which serve a significant catchment for residential, employment and services in the locality.

- 3.8.5 A review of existing parking supply has identified that, with the Muller Road Transport Improvements, opportunities for on-street parking in the area neighbouring the site will be primarily within the residential roads to the west of the site, where there are limited restrictions. However, as discussed at **Chapter 6**, demand for on-street parking from the proposed railway station is likely to be minimal given the nature of rail trips envisaged from the proposed station, the proximity of the station to a strategic walking and cycling route (Concorde Way) and with consideration to mode share forecasts.
- 3.8.6 The proposed railway station will be set in a predominantly residential area that also has excellent access to key services and amenities. The site is also located within 2km of a range of services available on Gloucester Road. Many of the services listed are also major employers in the local area, indicating that the proposed station could cater for a number of inbound (as well as outbound) commuter trips.

4. Proposed Development

4.1 Introduction

4.1.1 This chapter of the TS provides a description of the development proposals.

4.2 Overview of Development Proposals

4.2.1 The MetroWest Phase 2 project proposes to re-open the Henbury railway line to an hourly spur passenger service and increase rail services to Yate and Gloucester to a half-hourly frequency. The plans include new stations at Henbury, North Filton and Ashley Down. **Figure 1.2** shows a map of the proposed MetroWest Phase 2 network. The MetroWest proposals are running parallel to other significant local rail improvements in Bristol as part of an overarching plan to increase the capacity, flexibility and resilience of the network. This includes the Filton Bank Four Tracking project, which has been delivered.

4.2.2 The proposed Ashley Down station will be located adjacent to Station Lane in the Ashley Down area of Bristol. The station will be positioned on the BSW relief lines which follows the configuration delivered through the Filton Bank Four Tracking, where the BSW main lines are to the east and relief lines are to the west. The proposals for the station have been developed to “Approval in Principle” stage by Network Rail with the station being a Category F standard (i.e. unstaffed, <0.25 million annual passengers). Further detail in regard to passenger forecasting is provided in **Chapter 6**.

4.2.3 A general arrangement drawing of the proposed railway station is included at **Appendix A**.

4.2.4 The remainder of this chapter describes the elements of the proposals that will facilitate safe and suitable access to and from the station for passengers, particularly those travelling by sustainable modes and those who are mobility impaired. Further detail on the technical and engineering elements of the proposals are provided in the wider package of planning documents submitted.

4.3 Access

4.3.1 The main access to the station will be provided to the west from Station Road, crossing the Concorde Way (to Platform 1) with access to Platform 2 provided via steps, a footbridge and a lift. There is an existing subway which connects the east and west of the railway line and this will be used for pedestrian access to the proposed station from Station Lane.

4.3.2 As discussed in **Chapter 3**, Concorde Way is a strategic walking and cycling route in Bristol that connects the City Centre with the Bristol Northern Fringe via high-quality and largely traffic-free shared paths. The existing alignment of Concorde Way as it passes the western boundary of the site will be maintained through the development proposals. However, demarcated pedestrian crossing points will be provided to manage safe access and egress to the station for rail passengers.

4.3.3 The pedestrian route between Station Lane and Station Road via the rail underpass / subway is not currently compliant to Equality Act 2010 requirements; however, an accessible route will be provided between Station Lane and Station Road via Concorde Way to the north. A footway of maximum 1:20 gradient will be provided between the station entrance and Station Road, where two accessible parking bays will be provided. It is generally accepted that a maximum footway gradient of 1:20 is preferred, although a relaxation to 1:12 may be permitted where there is particularly difficult topography or over short distances (Manual for Streets, Design Manual for Roads and Bridges, Inclusive Mobility). On this basis it is considered reasonable to provide a maximum gradient of 1:12 for the route between Station Lane and Station Road (using the sloped path rather than the steps), where site conditions represent a barrier to providing the preferred gradient.

4.4 Parking

- 4.4.1 There will be no dedicated car park to serve the station; however, two accessible parking spaces will be provided close to the station entrance on Station Road. A loading bay will be provided, which can be utilised by maintenance vehicles or local residents. On-street parking on Station Road is currently unrestricted although the road layout is not considered conducive to encouraging pick-up / drop-off trips. In order to encourage cycle access to the station via Concorde Way and other local routes, 20 covered cycle spaces will be provided. This facility will be located on Platform 1 near to the station entrance.
- 4.4.2 The non-provision of a dedicated car park to serve the station is as per comparable stations located in Bristol. These include Lawrence Hill and Stapleton Road stations; both of these stations are located on the proposed MetroWest Phase 2 network and do not provide a dedicated car park. Filton Abbey Wood station, also located on the proposed MetroWest Phase 2 network, has a dedicated car park (54 spaces with three accessible spaces). This is located around 2.9km to the north-east of the development site and will therefore provide a close alternative for rail users wishing to access a station by car.

4.5 Station Facilities

- 4.5.1 The proposed station has been designed to a Category F standard. The proposed station facilities will include ticket machines, a Station Information and Security System (SISS) – comprising CCTV, Public Address (PA), passenger help points and departure information – platform / emergency lighting and emergency egress. A waiting shelter and uncovered seating will be provided on each platform. Refuge areas and help points will be located on each platform for persons with reduced mobility.

4.6 Summary

- 4.6.1 The proposed Ashley Down station will be located adjacent to Station Road in the Ashley Down area of Bristol. The station will be positioned on the BSW relief lines.
- 4.6.2 The main access to the station will be provided to the west from Station Road, crossing the Concorde Way (to Platform 1) with access to Platform 2 provided via steps, a footbridge and a lift. There is an existing subway which connects the east and west of the railway line and this will be used for pedestrian access to the proposed station from Station Lane. The existing alignment of Concorde Way as it passes the western boundary of the site will be maintained through the development proposals.
- 4.6.3 There will be no dedicated car park to serve the station; however, two accessible parking spaces will be provided close to the station entrance on Station Road. A loading bay will be provided, which can be utilised by maintenance vehicles or local residents.
- 4.6.4 The proposed station facilities will include ticket machines, a SISS – comprising CCTV, PA, passenger help points and departure information – platform / emergency lighting and emergency egress.

5. Construction Traffic Impact Assessment

5.1 Introduction

- 5.1.1 This chapter of the TS provides an appraisal of the likely impact of the construction phase on local transport conditions. This information is based on current information regarding the construction programme which has been provided by Network Rail. It should be acknowledged that the full construction programme will not be available until a contractor has been appointed, which will occur post-application. Therefore, at this stage, the impact assessment is commensurate with the level of information available.
- 5.1.2 Network Rail has significant experience in this type of construction and have high standards with regards to maintaining safe working environments and implementing mitigation measures to minimise the external impact of construction activities. Such measures will be negotiated and agreed between WECA, Network Rail and BCC as plans develop.

5.2 Construction Programme

- 5.2.1 Network Rail has provided an interim construction programme that provides indicative timescales for key activities in the construction of the proposed railway station. This is reproduced in **Table 5.1**. As discussed, the information contained in this chapter is subject to change following appointment of a contractor and as the proposals develop, but at this stage is considered appropriate in order to provide a high level assessment of traffic impact.
- 5.2.2 The construction timescales are currently given in terms of “possessions”. A possession refers to planned safety arrangements which control or prevent the normal movement of rail traffic on the network between defined locations, for a defined period of time. Therefore, this does not equate fully to the actual timescales of construction. A full construction programme will be defined and agreed with BCC following appointment of a contractor.

Table 5.1: Indicative Construction Programme and Timescales

Station Construction

Activity	No. of Possessions
Retaining wall on Concorde Way ¹	None
Cable diversions	4x 12-hour
Removal of old platform	2x 12-hour
Pile mat installation	3x 12-hour
Pile installation (incl. footbridge)	16x 12-hour
Trestle installation	13x 12-hour
Platform surfacing	3x 12-hour
M&E and platform furniture installation	3x 12-hour

Track

Activity	No. of Possessions
Tamper realignment ²	2

Footbridge Construction / UTX

Activity	No. of Possessions
Lift towers / stairs installation	3x 12-hour
Deck installation and all lines UTX	1x 30-hour

Notes:

1. Concorde Way to be closed for 2-3 weeks. Diversion to be agreed between WECA and BCC.
2. Timescales to be confirmed.

Source: Network Rail (2020)

5.3 Access for Construction Traffic

Site Compounds

5.3.1 Network Rail has identified three key locations in close proximity to the site which will function as construction compounds throughout the construction phase. These locations are shown below on **Figure 5.1** and are as follows:

- **Station Lane:** This will function as the main compound and will be located in the area of hardstanding adjacent to the subway.
- **Petherbridge Way:** The main access for Road Rail Vehicles (RRVs) will be through the Trust Ford Bristol (Accident Repair Centre) depot located off Petherbridge Way to the north of the site.
- **Station Road:** A small lay-down area will be provided on Station Road off-street in the vicinity of the site adjacent to Concorde Way.

Figure 5.1: Network Rail Construction Compounds



5.3.2 It is understood that any licensing arrangements that are required in respect of setting up and operating these site compounds (including rights of access) will be the responsibility of WECA as the client.

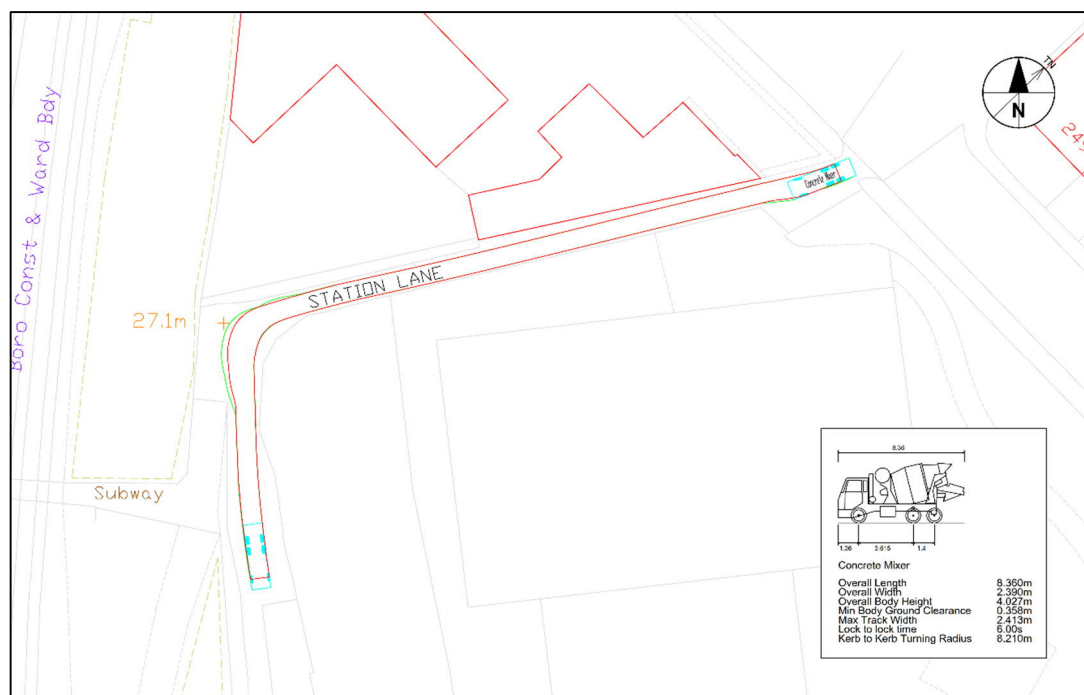
Vehicular Access

5.3.3 At this stage, it is understood that the majority of materials and equipment used in the construction phase will be delivered to site via RRV from the Petherbridge Way compound. Petherbridge Way serves large retail and industrial uses that require regular heavy vehicle access. It is therefore considered that Petherbridge Way will be able to accommodate the types of construction vehicle anticipated to require access to the compound.

5.3.4 Station Lane may require access for some smaller construction vehicles during the project. One such example is noted in the draft construction strategy as being the delivery of concrete to the site by pump from the site compound on Station Lane through the pedestrian subway. As discussed in **Chapter 3**, Station Lane functions primarily as a pedestrian and cycle route although vehicle access is permitted. Station Lane varies in width between 3-4m along its extent and as such is suitable for one-way vehicle traffic. There is existing usage of the lane by building contractors and associated construction vehicles. In order to demonstrate that access can be achieved by a representative construction vehicle (that will be used to undertake the type of work set out in the construction strategy), Swept Path Analysis (SPA) has been conducted using a concrete mixing transport truck. This is shown below in **Figure 5.2**.

- 5.3.5 Station Lane is signal-controlled where it meets the external highway network (Muller Road / Shaldon Road). However, two-way movements are not possible where it meets the junction and, as such, vehicle access and egress may need to be managed to ensure vehicles do not meet. These mitigation measures are to be outlined later in this chapter.

Figure 5.2: Swept Path Analysis of Station Lane



- 5.3.6 Both the Station Lane and Petherbridge Way compounds meet the local highway network at Muller Road. As discussed in **Chapter 3**, Muller Road is a strategic route which connects Gloucester Road to the M32 at Junction 2. It is therefore well-utilised by heavy vehicles and will facilitate efficient movement between the site and the wider strategic network. A discussion of the suitability of different routes to and from the site compounds for construction vehicles is provided below.
- 5.3.7 At this stage it is not anticipated that any abnormal loads will arrive to site via road. This is to be confirmed in the full construction strategy.
- 5.3.8 Any materials or equipment that arrive by rail beyond the RRV access point to the north of the site will not have an impact locally in traffic terms and therefore has not been considered as part of this TS. Analysis of impact on rail operations will be conducted by the rail industry.
- 5.3.9 Station Road will be utilised for a small lay-down area that will be positioned off-street in the vicinity of the site. Given that Station Road provides access to mainly residential properties and is fairly narrow (with on-street parking on both sides of the road), this route is considered unsuitable for large construction traffic. It is likely that the lay-down area will be accessed by smaller vehicles only, such as vans or small trucks.

Construction Traffic Routes

5.3.10 As discussed, the two main site compounds which will require heavy vehicle access, join the local highway network at Muller Road. The following routes have been analysed in terms of their suitability in providing heavy vehicle access to the strategic highway network from the site. For the purposes of this assessment, all heavy construction traffic is assumed to travel via the M4 Junction 19 to the north, i.e. where the M32 terminates.

- **Recommended Option:** Muller Road / M32 Junction 2 / M32 Northbound;
- **Alternative Option 1:** Muller Road / Filton Avenue / Ring Road (Eastbound) / M32 Junction 1 / M32 Northbound; and
- **Alternative Option 2:** Muller Road / Gloucester Road / Ring Road (Eastbound) / M32 Junction 1 / M32 Northbound.

5.3.11 Each route is mapped out on **Figure 5.3**.

Recommended Option: Muller Road / M32 Junction 2 / M32 Northbound

5.3.12 This option offers the most direct route to the strategic highway network, joining the M32 at its closest point to the site. Because of this, Muller Road tends to experience traffic congestion during peak times and particularly in the vicinity of key junctions between the site and the M32, including the M32 / B4469 roundabout junction and B4469 Muller Road / Glenfrome Road. The proximity of Eastgate Retail Park (together with the adjacent Tesco Extra and Ikea) to the M32 Junction 2 tends to exacerbate congestion at peak times.

5.3.13 In addition to these junctions and significant retail uses, which are concentrated in the vicinity of the M32 Junction 2, other "sensitive receptors" (i.e. road links / junctions or land uses that are considered to be particularly sensitive to increases in traffic) located on this route include Fairfield High School and residential frontage along Muller Road.

5.3.14 There is a significant presence of on-street parking on both sides of Muller Road where residential dwellings abut the carriageway. An on-carriageway cycle lane is also provided on both sides of Muller Road between Stottbury Road and Dormer Road. However, Muller Road benefits from a wide carriageway with no major pinch points meaning that these potential obstructions do not materially affect vehicle flow along the corridor.

Alternative Option 1: Muller Road / Filton Avenue / Ring Road (Eastbound) / M32 Junction 1 / M32 Northbound

5.3.15 This option is one of two routes that does not utilise the M32. Filton Avenue meets Muller Road at a signalised junction approximately 1km to the north of the site. Muller Road to the north of the site is similar in character to the route to the south and experiences congestion towards Gloucester Road at peak times. There is a greater level of residential frontage along this section of the route, with significant retail uses located off Petherbridge Way as well as a Lidl supermarket located adjacent. On-street parking is present on both sides of Muller Road in this direction but, as above, this does not tend to reduce the carriageway width.

5.3.16 The junction between Muller Road and Filton Avenue is large and therefore would facilitate heavy vehicle turning movements.

5.3.17 Filton Avenue routes through predominantly residential areas, although some retail centres are based along this Avenue. As such, there is a significant level of on-street parking along the entire route which does at points reduce the carriageway width enough to restrict two-way vehicle movement.

5.3.18 Filton Avenue meets the ring road (A4174) at a major signalised junction, with the form of the junction able to facilitate heavy vehicle turning movements.

5.3.19 The remainder of the route towards the M32 at Junction 1 (a distance of around 2.5km) is along a two-lane carriageway which is conducive to heavy vehicle movements.

Alternative Option 2: Muller Road / Gloucester Road / Ring Road (Eastbound) / M32 Junction 1 / M32 Northbound

- 5.3.20 The second option which does not utilise the M32 instead uses Gloucester Road. The existing conditions along Muller Road to the north of the site are described above. Muller Road meets Gloucester Road at a three-arm signalised junction.
- 5.3.21 Gloucester Road runs roughly parallel to Filton Avenue and forms a similar, though perhaps a more strategic, function in providing direct access to Filton and the north of Bristol through predominantly residential areas with a number of retail centres located along each route. Given that Gloucester Road continues to the M5 at Junction 16, the corridor experiences higher traffic levels than Filton Avenue. However, there is less incidence of on-street parking (owing to more traffic restrictions) and fewer pinch points.
- 5.3.22 Gloucester Road meets the A4174 at Filton Roundabout, a signalised four-arm roundabout. Filton Roundabout is approximately 3.5km to the west of the M32, with the remainder of the A4174 route comprising a dual carriageway.

Summary

- 5.3.23 It is recommended that construction traffic accesses the strategic highway network via Muller Road and the M32 (at Junction 2). This provides the most direct route to and from the site and it is considered that the route is conducive to heavy vehicle movement. The Muller Road corridor can experience congestion (particularly at sensitive receptors along the road), but the M32 effectively bypasses other sensitive locations that are found to be present on both Filton Avenue and Gloucester Road. Furthermore, there is an ability to time construction movements to occur outside of peak times (discussed below) which will minimise the impact of construction traffic on the local highway network.

5.4 Construction Traffic Generation

- 5.4.1 There is not currently sufficient information available to derive a robust traffic generation forecast for the construction phase of the development. This is due to the indicative nature of the construction programme at this stage and important input required from an appointed contractor.

5.5 Staff Travel

- 5.5.1 The number of construction staff to be employed on-site during each phase is to be confirmed following the appointment of a contractor. At this stage, it is envisaged that there will be a maximum of 25 staff on-site at any one time during possession work. In terms of staff travel to and from site, it is anticipated that there will be no (or minimal) staff parking available at any of the site compounds owing to the inherently sustainable location of the development site. Some transport arrangements will be made for staff such that any vehicle movements associated with staff travel be grouped and minimised; this will be confirmed as part of the Construction Traffic Management Plan (CTMP) or similar document. As such, the traffic impact of construction staff trip generation is likely to be negligible.

5.6 Likely Impact and Mitigation Required

- 5.6.1 Given the level of information available at this stage regarding the construction phase, it is not possible to provide a robust assessment of the likely impact of construction traffic on the local network. However, there are a package of measures available to minimise any impact which will be included in an overarching CTMP or similar document.
- 5.6.2 The purpose of a CTMP is to protect the environment, amenity and safety of local residents, businesses, the general public and the surroundings in the vicinity of the site. Potential impacts of construction traffic include noise, vehicle exhaust emissions, dust, and mud and debris on roads, as well as possible road safety issues.
- 5.6.3 It is anticipated that a CTMP will be secured via planning condition with the scope and content to be agreed between WECA, Network Rail and BCC.
- 5.6.4 At this stage it is envisaged that the CTMP will include (but not limited to) the following:

- Core working hours.
- Full construction programme.
- Details of heavy vehicle trip generation and routeing to / from the site (including “abnormal loads”).
- Details of any special arrangements in place for construction vehicle access (including at the interface between the site and the local highway network).
- Staff numbers and travel arrangements (N.B. it is anticipated that no parking will be provided for staff and details will be provided to staff of sustainable travel options).
- Details of safe walking and cycling routes for pedestrians in the vicinity of the site (particularly with regards to Concorde Way).
- Key points of contact within the project team (including appointed contractor).
- Details of a communication strategy to ensure that local residents, businesses and other stakeholders are kept up to date with plans and progress, and particularly any disruptive activities.

5.7 Summary

- 5.7.1 This chapter has provided an appraisal of the likely impact of the construction phase on local transport conditions.
- 5.7.2 Petherbridge Way serves large retail and industrial uses that require regular heavy vehicle access. It is therefore considered that Petherbridge Way will be able to accommodate the types of construction vehicle anticipated to require access to the compound. Station Lane may require access for some smaller construction vehicles during the project. Both the Station Lane and Petherbridge Way compounds meet the local highway network at Muller Road, which is well-utilised by heavy vehicles and will facilitate efficient movement between the site and the wider strategic network. Station Road will be utilised for a small lay-down area that will be positioned off-street in the vicinity of the site.
- 5.7.3 Three route options have been analysed in terms of their suitability in providing heavy vehicle access to the strategic highway network from the site. It is recommended that construction traffic accesses the strategic highway network via Muller Road and the M32 (at Junction 2). This provides the most direct route to and from the site and it is considered that the route is conducive to heavy vehicle movement.
- 5.7.4 In terms of staff travel to and from the premises, it is anticipated that there will be no (or minimal) staff parking available at any of the site compounds owing to the inherently sustainable location of the development scheme. Some transport arrangements will be made for staff such that any vehicle movements associated with staff travel be grouped and minimised; this will be confirmed as part of the CTMP or similar document. As such, the traffic impact of construction staff trip generation is likely to be negligible.
- 5.7.5 There could be an opportunity to manage arrival/departure times of construction traffic, in order to limit impact on the highway network during the most congested periods, and to avoid noise and nuisance impact at “unsociable times”. There will be consideration to opportunities for construction consolidation.
- 5.7.6 It is anticipated that an overarching CTMP or similar document will be secured via planning condition with the scope and content to be agreed between WECA, Network Rail and BCC. The purpose of a CTMP is to protect the environment, amenity and safety of local residents, businesses, the general public and the surroundings in the vicinity of the site. Potential impacts of construction traffic include noise, vehicle exhaust emissions, dust, and mud and debris on roads, as well as possible road safety issues.

6. Operational Traffic Impact Assessment

6.1 Introduction

6.1.1 This chapter provides an initial overview of the likely operational impact of the development proposals. The initial assessment is based on the findings of a MetroWest Phase 2 Strategic Outline Business Case Forecasting Report prepared for WECA by CH2M in 2015. The CH2M Forecasting Report considered a range of scenarios for MetroWest Phase 2. The following section focuses on the forecast outcomes of the approved package of works (which includes Ashley Down station).

6.2 Forecasting

6.2.1 The Forecasting Report derived rail passenger demand using a combination of industry-standard tools (such as MOIRA, National Rail Travel Survey) and bespoke methodologies. The overall rail passenger demand is comprised of rail trips generated by new stations, the diversion of existing rail trips to new stations, and changes in demand at existing stations based on new or amended services (including the suppression of demand caused by additional station calls). The Forecasting Report also considers the highway network impacts of rail demand.

6.2.2 Ashley Down station will have a catchment of circa 17,050 people within 1km, and a stated 41,950 inhabitants within 2km. The 2km figure has been adjusted to reflect the overlap between catchments for other stations, in particular the proposed Constable Road railway station that was considered at an earlier stage of MetroWest Phase 2 but has since been discounted. Constable Road is located less than 1.5km to the north of the site. Ashley Down station will be the only new station located along the Filton Bank stretch of the railway line. In terms of employment population, Ashley Down station will have a catchment of 6,250 people within 1km and 13,100 (adjusted) within 2km. The proximity of the site to key local trip generators and attractors (shown in **Table 3.2**) supports these catchment figures.

6.2.3 The annual passenger demand for Ashley Down station is forecast to be 89,400 passengers. As described above, this figure has been derived from a complex rail passenger demand model that accounts for both new and existing trips that fall within an appropriate catchment area of the proposed station. However, this figure may be higher when considering the additional demand that was previously assigned to Constable Road. In terms of average daily passenger demand, Ashley Down station is forecast to generate 284 daily trips (one-way). Again, this figure could be greater due to the additional demand from Constable Road.

6.2.4 Ashley Down, and other new stations, will be located relatively close to the existing Filton Abbey Wood station. It has therefore been assumed that anything other than local rail trips are unlikely to divert away from Filton because it will continue to have a superior service provision for regional / national trips including direct services to Cardiff, Bath, Gloucester, and other key destinations (where interchange is required). As such, over 75% journeys to / from Ashley Down station are likely to be to / from other stations in the MetroWest area. Around 50% of these local journeys are likely to be to / from central Bristol (with a focus on Bristol Temple Meads).

6.2.5 Passenger demand levels have been expanded to provide a forecast of mode share and origin of travel. This has been established using National Rail Travel Survey data, validated using information from local stations and adjustments based on site-specific accessibility conditions. **Table 6.1** shows the forecast mode share of passengers by distance travelled to Ashley Down station, as presented in the CH2M Forecasting Report. It is assumed that the vast majority of trips through the station will be day returns. Therefore, the total number of trips shown in the Table (142) represent one leg of a return journey, with the second leg assumed to utilise the same mode. The proportions shown in brackets represent mode shares within each distance category.

Table 6.1: Mode share of passengers by distance travelled to Ashley Down station

Catchment	Walk	Bus	Car (drop-off)	Bicycle	Taxi	All
Less than 1km	41 (89%)	-	1 (2%)	-	4 (9%)	46
From 1 to 2km	59 (76%)	12 (15%)	1 (1%)	6 (8%)	-	78
From 2 to 3km	18 (95%)	1 (5%)	-	-	-	19
Over 3km	-	-	-	-	-	-
Total	118 (83%)	12 (9%)	2 (1%)	6 (4%)	4 (3%)	142

Note: Table adapted from CH2M (2015).

- 6.2.6 **Table 6.1** shows that most passengers are forecast to travel to / from Ashley Down station by foot. This remains true for distances up to 3km. Bus patronage is generally assumed to constitute a low proportion of trips, with a 9% share of total trips to / from the station. Cycling is forecast to have a 4% mode share. No allowances have been made for car trips due to there being no dedicated parking resource proposed for the station, although there will be two accessible spaces provided on Station Road. On-street parking on Station Road is currently unrestricted although the road layout is not considered conducive to encouraging pick-up / drop-off trips from private cars and taxis.
- 6.2.7 In terms of trip quantum, there is forecast to be a significant reduction in trips beyond 2km, compared to less than 2km. Above 3km, it is assumed that Ashley Down station will generate no demand due to the relative accessibility to other stations at this distance.

6.3 Impact on Local Parking Supply

- 6.3.1 The Forecasting Report sets out the expected trip generation for users of the proposed station, including the forecast number of trips, by distance from the station. Forecasts indicate that over 75% of journeys are likely to be extracted from other stations in the MetroWest area, with most trips to / from the new station anticipated to be made by foot. This suggests there will be limited demand for local parking and therefore only a marginal impact on parking supply in the areas around the station, as identified in **Chapter 3**.

6.4 Summary

- 6.4.1 With regards to operational impact, Ashley Down station will have a negligible impact on the local highway network due to the extremely low proportion of trips made by car. It has been demonstrated that the station is accessible by foot and by bike, particularly using Concorde Way and along relative quiet residential streets in the local neighbourhood. A total of 20 covered cycle spaces will be provided at the station, which exceeds current planning requirements, offering the potential to encourage cycle trips away from other modes, and improve the catchment to the station from areas less well-served by buses. The station will also be located less than 400m from bus stops serving high frequency bus routes. It is on this basis that the local transport network is considered to have sufficient capacity to accommodate an increase in demand arising from the proposed development. Due to the negligible vehicle trip generation forecast for the station during operation, no formal junction or network capacity modelling has been presented in the TS.

7. Conclusions

- 7.1.1 AECOM was commissioned by WECA to provide transport planning inputs to a Prior Approval Submission for the re-opening of Ashley Down railway station in Bristol. This proposal forms part of the MetroWest Phase 2 project which will re-open the Henbury railway line to passenger services with new railway stations at Ashley Down, North Filton and Henbury.
- 7.1.2 The TS has reviewed relevant transport planning policies for the proposed development at a national, local and regional level. The development is considered to align with planning policy.
- 7.1.3 The proposed railway station will be located adjacent to Station Road in the Ashley Down area of Bristol. The local highway network includes Station Lane, Station Road and Muller Road. The development site is conveniently located alongside Concorde Way, a strategic walking and cycling route in Bristol that connects the City Centre with the Bristol Northern Fringe via dedicated and largely traffic-free shared paths. A transport improvement scheme is proposed for Muller Road (Muller Road Transport Improvements) which is expected to enhance the attractiveness of walking, cycling and public transport.
- 7.1.4 The closest bus stops to the development site are located on Ashley Down Road and Muller Road, and are served by bus services 70, 17, 24 and 506. The timetable information demonstrates that there is an opportunity to promote interchange between bus and rail, with a good range of bus services at regular frequencies. The proposed railway station will be set in a predominantly residential area that also has excellent access to key services and amenities.
- 7.1.5 The proposed station will be positioned on the BSW relief lines. The main access to the station will be provided to the west from Station Road, crossing the Concorde Way (to Platform 1) with access to Platform 2 provided via steps, a footbridge and a lift. There is an existing subway which connects the east and west of the railway line and this will be used for pedestrian access to the proposed station from Station Lane. There will be no dedicated car park to serve the station; however, two accessible parking spaces will be provided close to the station entrance on Station Road. A loading bay will be provided, which can be utilised by maintenance vehicles or local residents. 20 covered cycle spaces will be provided.
- 7.1.6 Three route options have been analysed in terms of their suitability in providing heavy vehicle access to the strategic highway network from the site. It is recommended that construction traffic accesses the strategic highway network via Muller Road and the M32 (at Junction 2). In terms of staff travel to and from site, it is anticipated that there will be no (or minimal) staff parking available at any of the site compounds owing to the inherently sustainable location of the development site. As such, the traffic impact of construction staff trip generation is likely to be negligible. It is anticipated that an overarching CTMP or similar document will be secured via planning condition with the scope and content to be agreed between WECA, Network Rail and BCC.
- 7.1.7 With regards to operational impact, Ashley Down station will have a negligible impact on the local highway network due to the extremely low proportion of trips made by car. It has been demonstrated that the station is accessible by foot and by bike, particularly using Concorde Way and along relative quiet residential streets in the local neighbourhood. The station will also be located less than 400m from bus stops serving high frequency bus routes. Forecasting indicates there will be limited demand for and impact on parking supply in the areas around the station. It is on this basis that the local transport network is considered to have sufficient capacity to accommodate an increase in demand arising from the proposed development.

Figures

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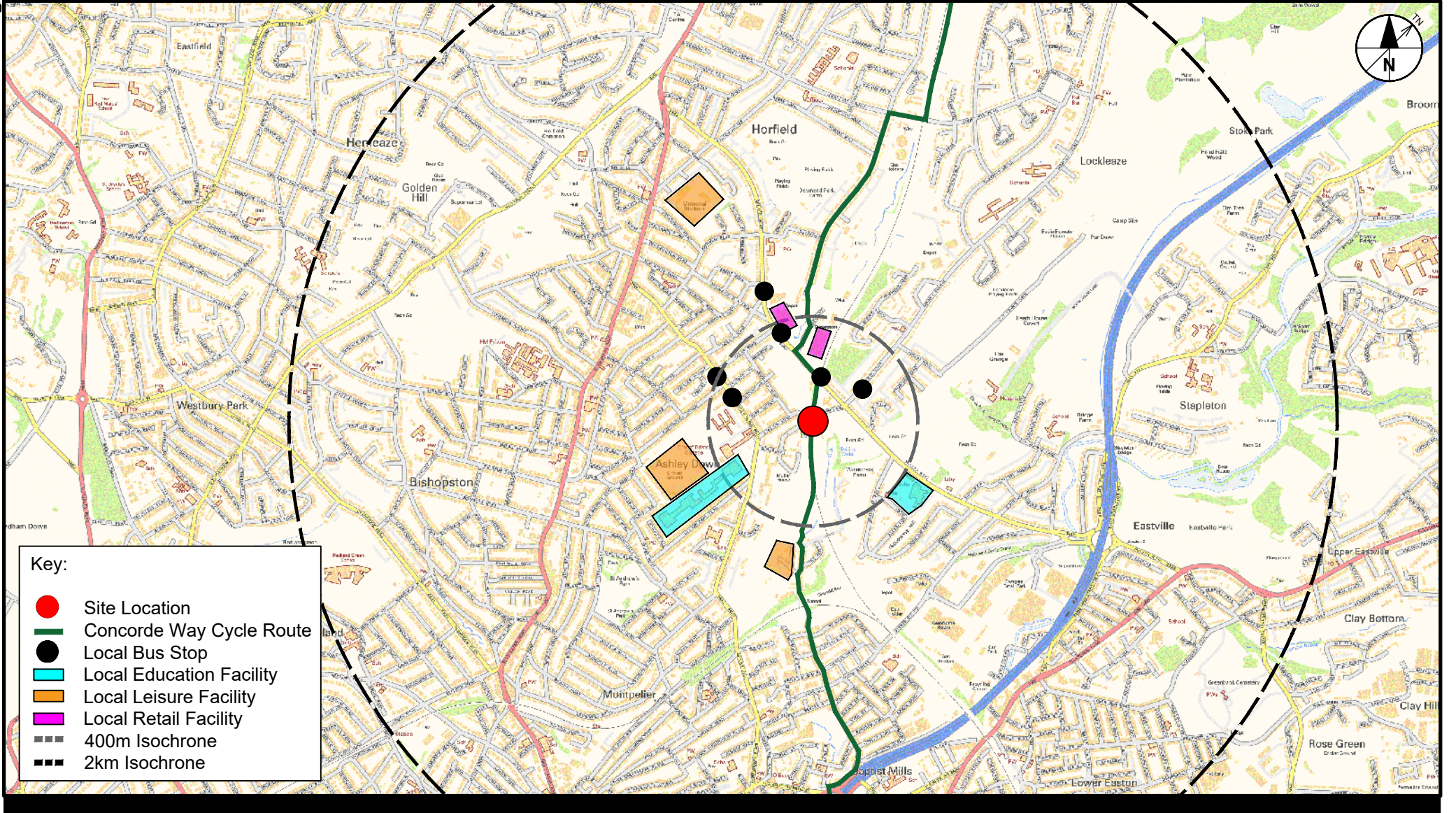
Ashley Down Railway Station

Transport Statement

Figure 1.1: Site Location and Local Context



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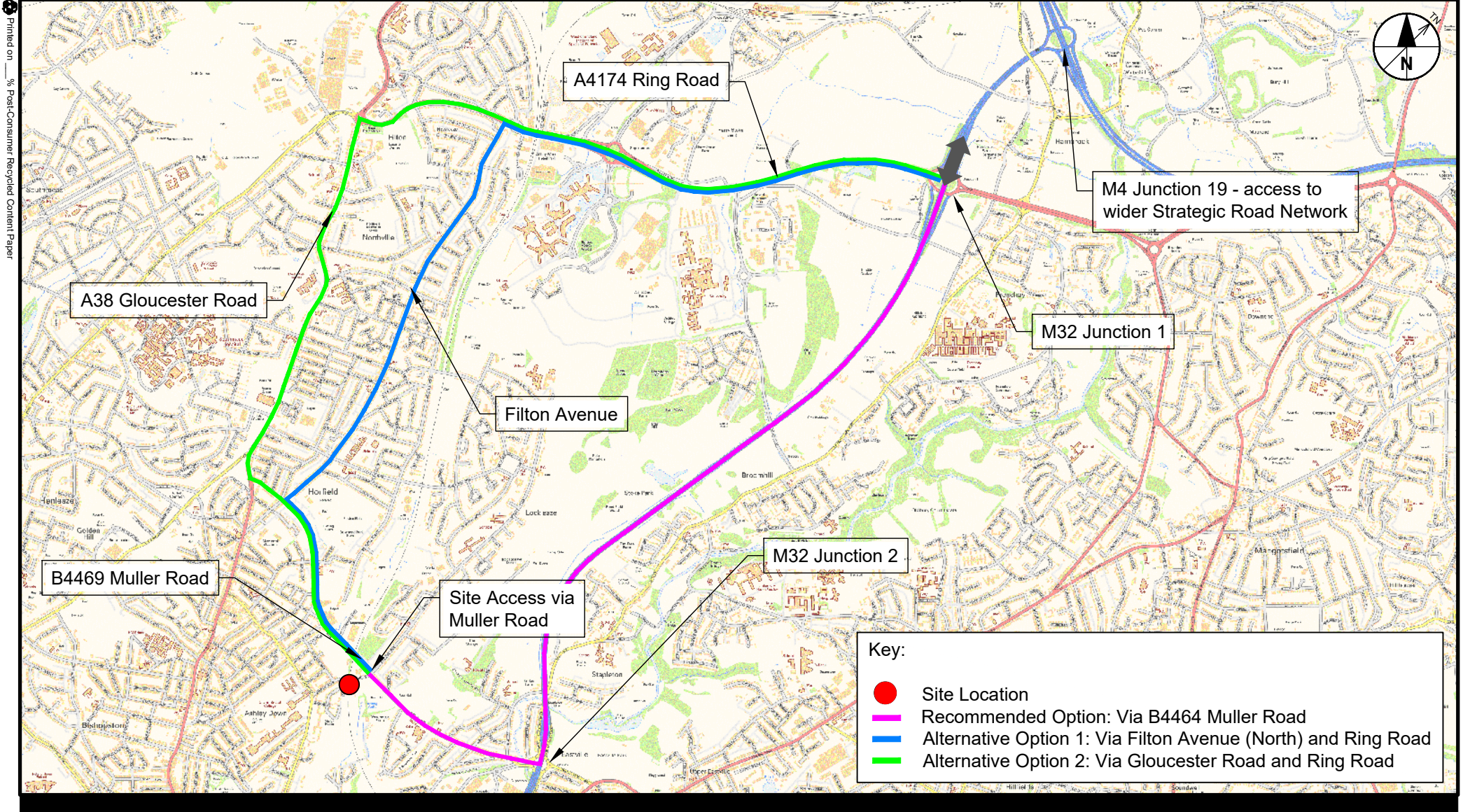


Ashley Down Railway Station

Transport Statement
Figure 3.9: Site Accessibility



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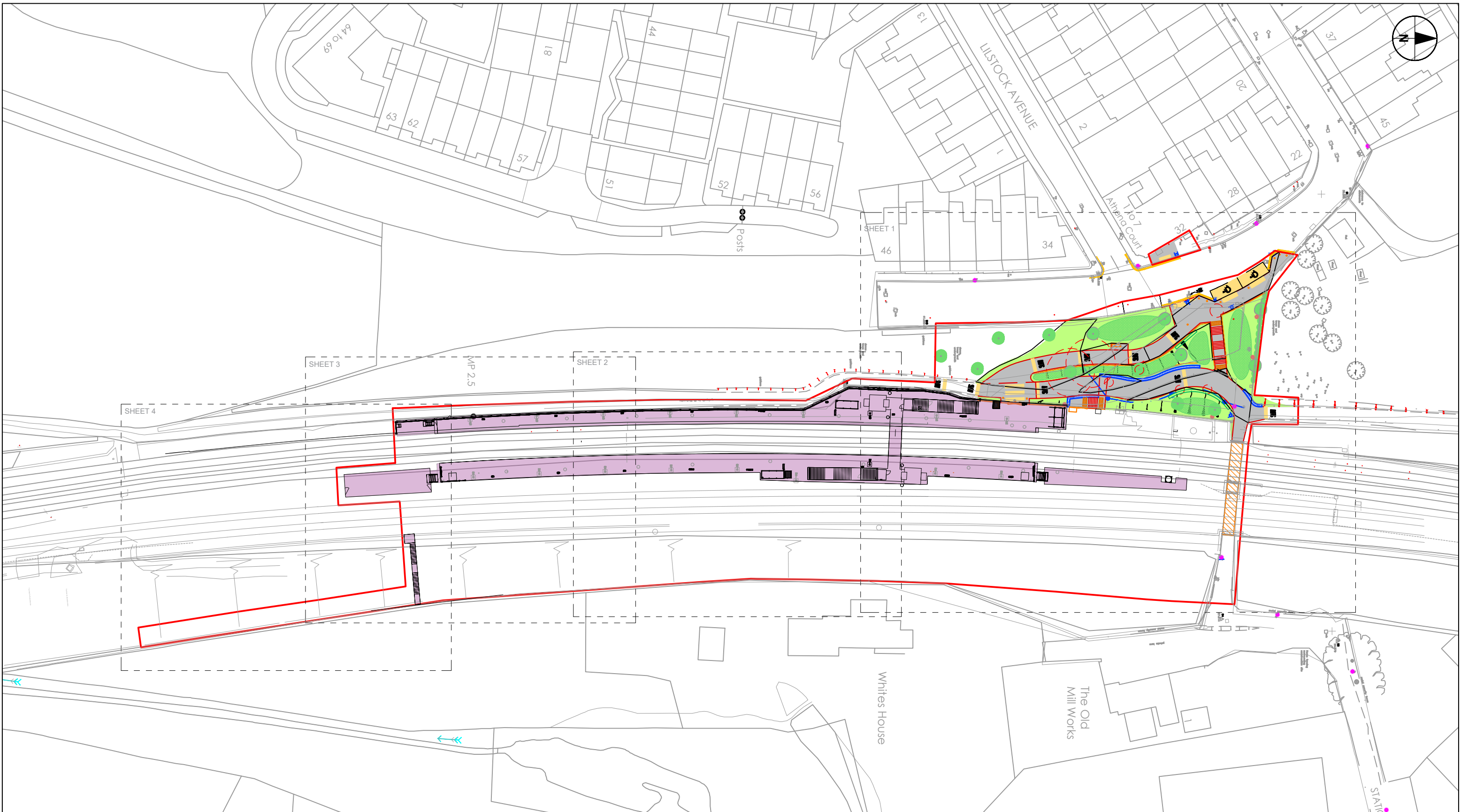
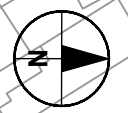
Ashley Down Railway Station

Transport Statement

Figure 5.3: Construction Traffic Routes



Appendix A



NOTES:

Proposed Station designed by Network Rail. For further detail on station design refer to Ashley Down Station Proposed General Arrangement and Elevation (drawing number W1043J-IDG-DRG-ECV-000011, rev A03)

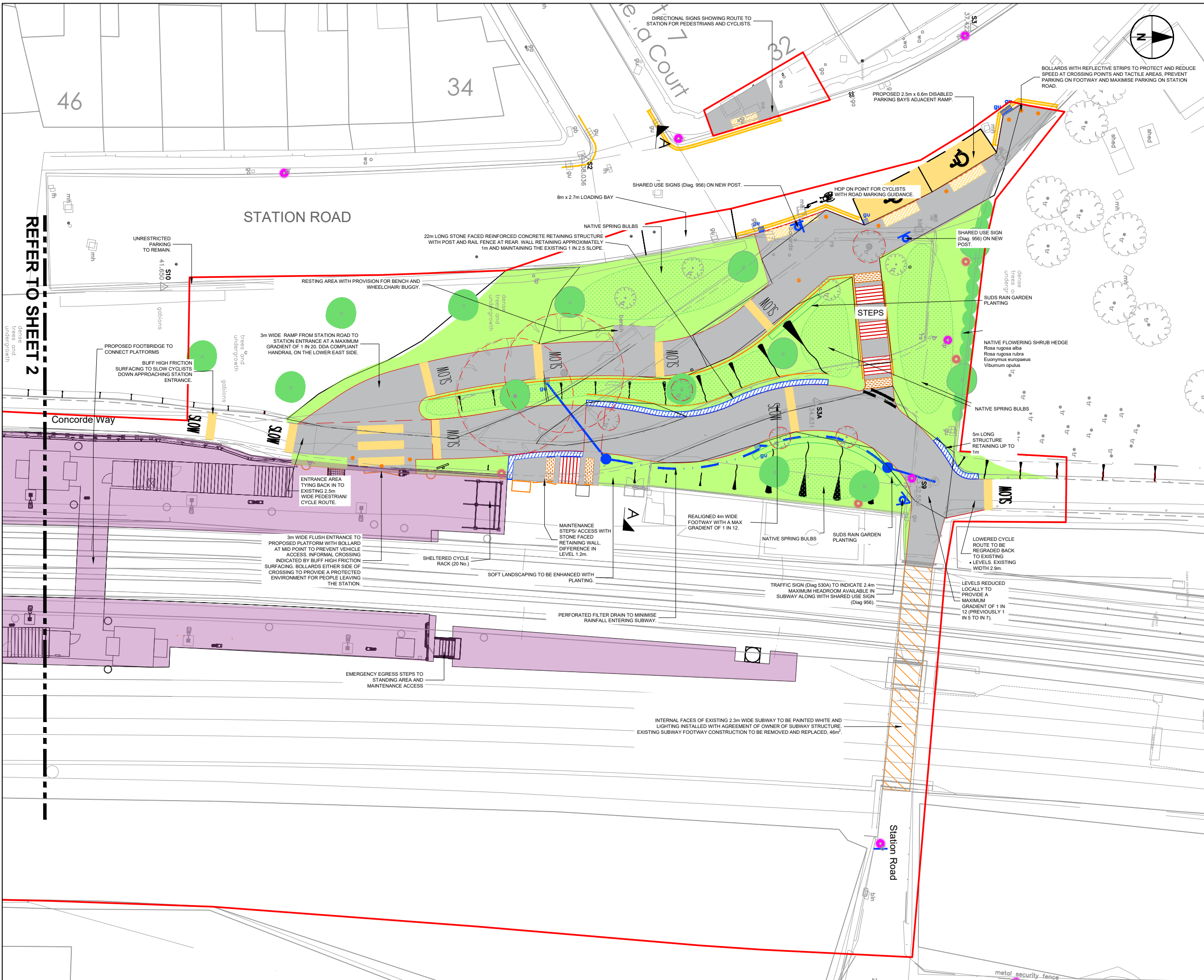
Proposed updates to public realm area including paths and landscaping designed by Bristol City Council'

Proposed station lighting can be found on Ashley Down Station Proposed General Arrangement and Elevation (drawing number W1043J-IDG-DRG-ECV-000011, rev A03) and proposed public realm lighting can be found on Ashley Down Station Shared Path Modifications - Lighting and Electrical requirements (drawing number E17052-SL-001-0)

KEY

	SITE BOUNDARY		PROPOSED RAIL STATION
	FURTHER DETAIL PROVIDED IN CALLOUT SHEETS		MEADOW GRASS IE. EMORSGATE EM4 MIX
	TREE RECOMMENDED FOR REMOVAL		SUDS RAINGARDEN PLANTING SWALE
	PROPOSED BOLLARD		NATIVE SPRING BULBS NARCISSUS, GALANTHUS, HYACINTHOIDES, CROCUS
	EXISTING LIGHTING COLUMN		NATIVE FLOWERING SHRUBS ROSA RUGOSA ALBA, ROSA RUGOSA RUBRA, VIBURNUM OPULUS, EUONYMUS EUROPAEUS
	PROPOSED TREE QUERCUS ROBUR, BETULA PENDULA, SORBUS AUCUPARIA, PRUNUS PADUS		BIRD AND BAT BOXES IN APPROXIMATE SUITABLE LOCATIONS AS ADVISED BY BCC ECOLOGIST
	RETAINED TREES		PROPOSED REALIGNED FOOTPATHS AND CYCLEWAYS
	DISABLED PARKING		SUBWAY

Client WEST OF ENGLAND COMBINED AUTHORITY (WECA)				
AECOM				
Project ASHLEY DOWN RAILWAY STATION				
Drawing PROPOSED SITE LAYOUT PLAN OVERVIEW SHEET				
AECOM Dwg.No. ACM_WECA_ENV_CAD_0001				
Approved FH	Checked SCN	Designed GM	Drawn GM	Sheet of 1 1
Date 22/04/21	Scale 1:500	Drawing Size A3		Revision v2



- KEY**
- SITE BOUNDARY
 - TREE RECOMMENDED FOR REMOVAL
 - PROPOSED BOLLARD
 - EXISTING LIGHTING COLUMN
 - PROPOSED TREE
QUERCUS ROBUR, BETULA PENDULA, SORBUS AUCUPARIA, PRUNUS PADUS
 - RETAINED TREES
 - DISABLED PARKING
 - PROPOSED RAIL STATION
 - MEADOW GRASS IE. EMORSGATE EM4 MIX
 - SUDS RAINGARDEN PLANTING SWALE
 - NATIVE SPRING BULBS
NARCISSUS, GALANTHUS, HYACINTHOIDES, CROCUS
 - NATIVE FLOWERING SHRUBS
ROSA RUGOSA ALBA, ROSA RUGOSA RUBRA, VIBURNUM OPULUS, EUONYMUS EUROPAEUS
 - BIRD AND BAT BOXES IN APPROXIMATE SUITABLE LOCATIONS AS ADVISED BY BCC ECOLOGIST
 - PROPOSED REALIGNED FOOTPATHS AND CYCLEWAYS
 - SUBWAY

NOTES:

Proposed Station designed by Network Rail. For further detail on station design refer to Ashley Down Station Proposed General Arrangement and Elevation (drawing number W1043J-IDG-DRG-ECV-000011, rev A03)

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Client
WEST OF ENGLAND COMBINED AUTHORITY (WECA)

AECOM

Project
ASHLEY DOWN RAILWAY STATION

Drawing
PROPOSED SITE LAYOUT PLAN
SHEET 1 OF 4

AECOM Dwg.No. ACM_WECA_ENV_CAD_0002				
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Date 22/04/21	Scale 1:200	Drawing Size A3	Revision v1	1 4

REFER TO SHEET 2

REFER TO SHEET 3



- KEY**
- SITE BOUNDARY
 - TREE RECOMMENDED FOR REMOVAL
 - PROPOSED BOLLARD
 - EXISTING LIGHTING COLUMN
 - PROPOSED TREE
QUERCUS ROBUR, BETULA PENDULA,
SORBUS AUCUPARIA, PRUNUS PADUS
 - RETAINED TREES
 - DISABLED PARKING
 - PROPOSED RAIL STATION
 - MEADOW GRASS IE. EMORSGATE
EM4 MIX
 - SUDS RAINGARDEN PLANTING SWALE
 - NATIVE SPRING BULBS
NARCISSUS, GALANTHUS,
HYACINTHOIDES, CROCUS
 - NATIVE FLOWERING SHRUBS
ROSA RUGOSA ALBA, ROSA RUGOSA
RUBRA, VIBURNUM OPULUS,
EUONYMUS EUROPAEUS
 - BIRD AND BAT BOXES IN APPROXIMATE SUITABLE
LOCATIONS AS ADVISED BY BCC ECOLOGIST
 - PROPOSED REALIGNED FOOTPATHS AND
CYCLEWAYS
 - SUBWAY

NOTES:

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Client
WEST OF ENGLAND COMBINED AUTHORITY (WECA)



Project
ASHLEY DOWN RAILWAY STATION

Drawing
PROPOSED SITE LAYOUT PLAN
SHEET 2 OF 4

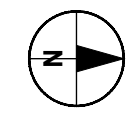
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Date 22/04/21	Scale 1:200	Drawing Size A3	Revision v1		

REFER TO SHEET 1

REFER TO SHEET 4

MP 2.5



- KEY**
- SITE BOUNDARY
 - TREE RECOMMENDED FOR REMOVAL
 - PROPOSED BOLLARD
 - EXISTING LIGHTING COLUMN
 - PROPOSED TREE
QUERCUS ROBUR, BETULA PENDULA,
SORBUS AUCUPARIA, PRUNUS PADUS
 - RETAINED TREES
 - DISABLED PARKING
 - PROPOSED RAIL STATION
 - MEADOW GRASS IE. EMORSGATE
EM4 MIX
 - SUDS RAINGARDEN PLANTING SWALE
 - NATIVE SPRING BULBS
NARCISSUS, GALANTHUS,
HYACINTHOIDES, CROCUS
 - NATIVE FLOWERING SHRUBS
ROSA RUGOSA ALBA, ROSA RUGOSA
RUBRA, VIBURNUM OPULUS,
EUONYMUS EUROPAEUS
 - BIRD AND BAT BOXES IN APPROXIMATE SUITABLE
LOCATIONS AS ADVISED BY BCC ECOLOGIST
 - PROPOSED REALIGNED FOOTPATHS AND
CYCLEWAYS
 - SUBWAY

PROPOSED UP PLATFORM
WITHIN FOOT PRINT OF DISUSED
PLATFORM

ACCESS STEPS CREST TO TOE
OF EMBANKMENT.

REFER TO SHEET 2

NOTES:

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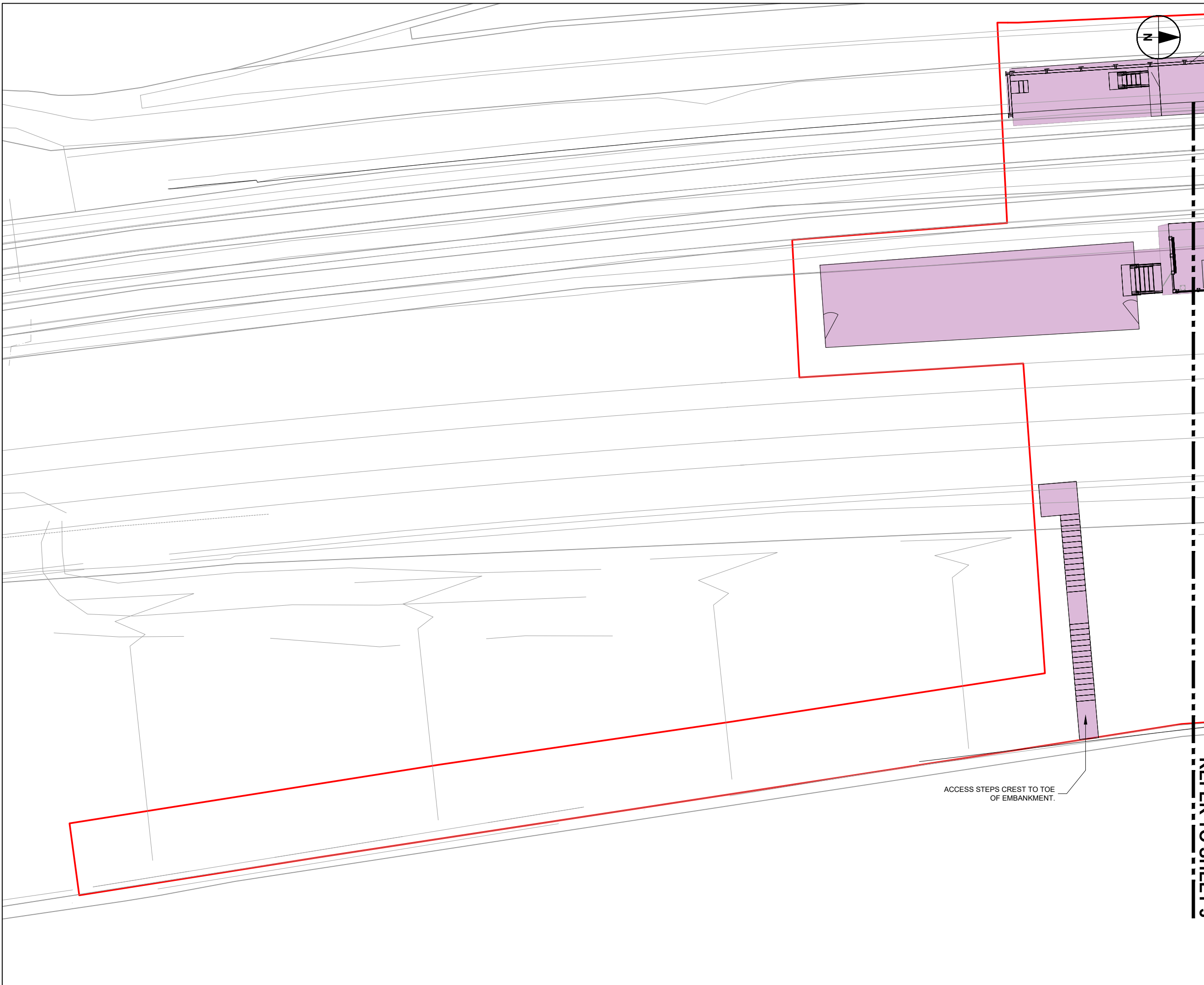


Project
ASHLEY DOWN RAILWAY STATION

Drawing
PROPOSED SITE LAYOUT PLAN
SHEET 3 OF 4

AECOM Dwg.No. ACM_WECA_ENV_CAD_0004

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Date	22/04/21	Scale	1:200	Drawing Size	A3
				Revision	v1



ACCESS STEPS CREST TO TOE OF EMBANKMENT.

- KEY**
- SITE BOUNDARY
 - TREE RECOMMENDED FOR REMOVAL
 - PROPOSED BOLLARD
 - EXISTING LIGHTING COLUMN
 - PROPOSED TREE
QUERCUS ROBUR, BETULA PENDULA,
SORBUS AUCUPARIA, PRUNUS PADUS
 - RETAINED TREES
 - DISABLED PARKING
 - PROPOSED RAIL STATION
 - MEADOW GRASS IE. EMORSGATE
EM4 MIX
 - SUDS RAINGARDEN PLANTING SWALE
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 - BIRD AND BAT BOXES IN APPROXIMATE SUITABLE
LOCATIONS AS ADVISED BY BCC ECOLOGIST
 - PROPOSED REALIGNED FOOTPATHS AND
CYCLEWAYS
 - SUBWAY

NOTES:

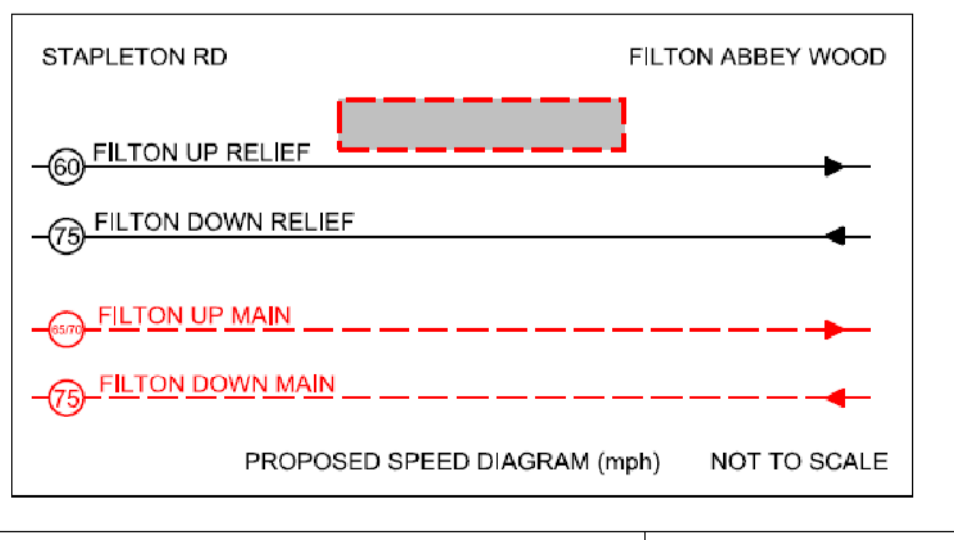
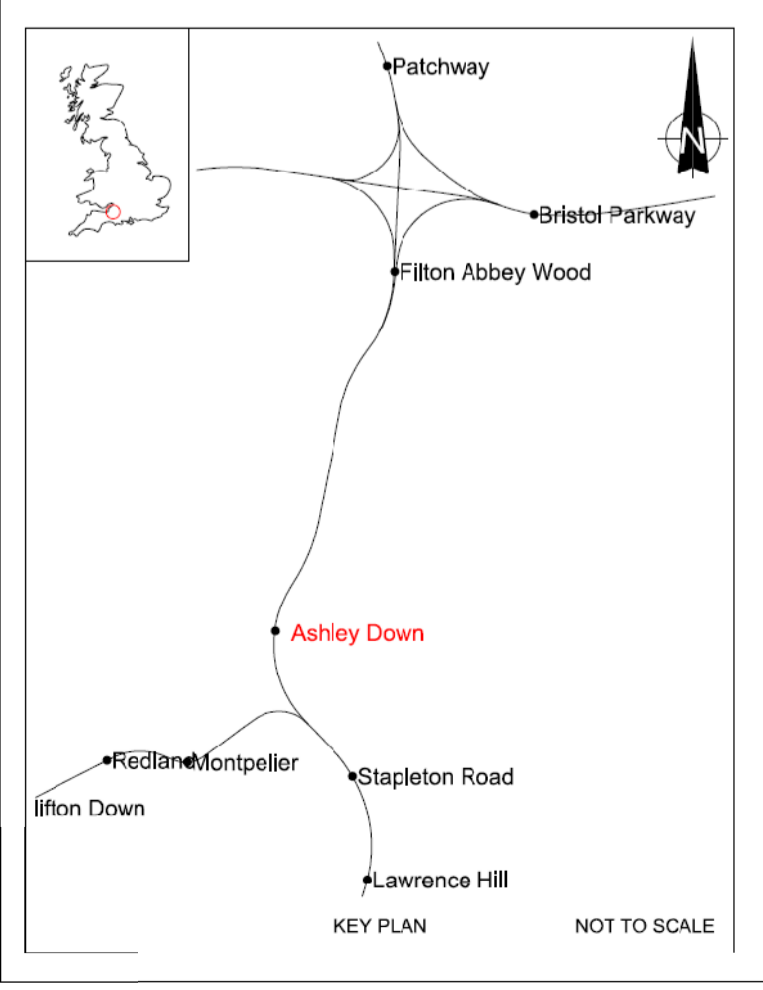
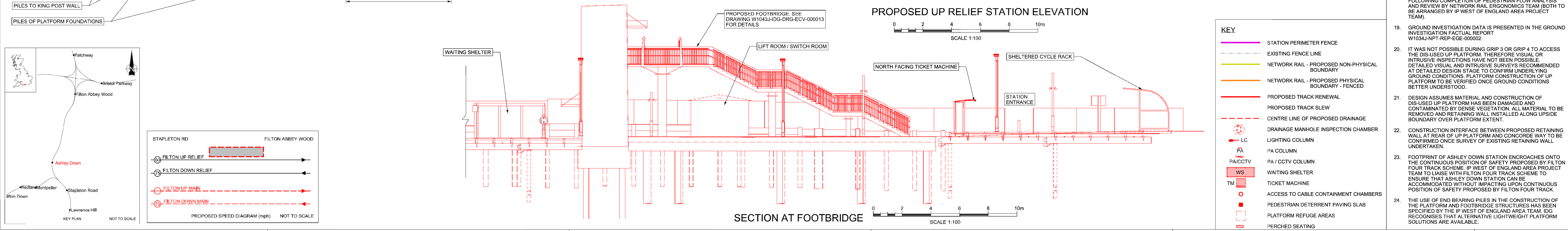
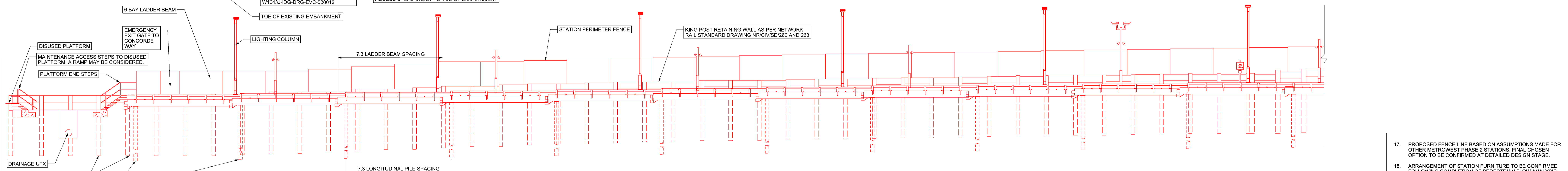
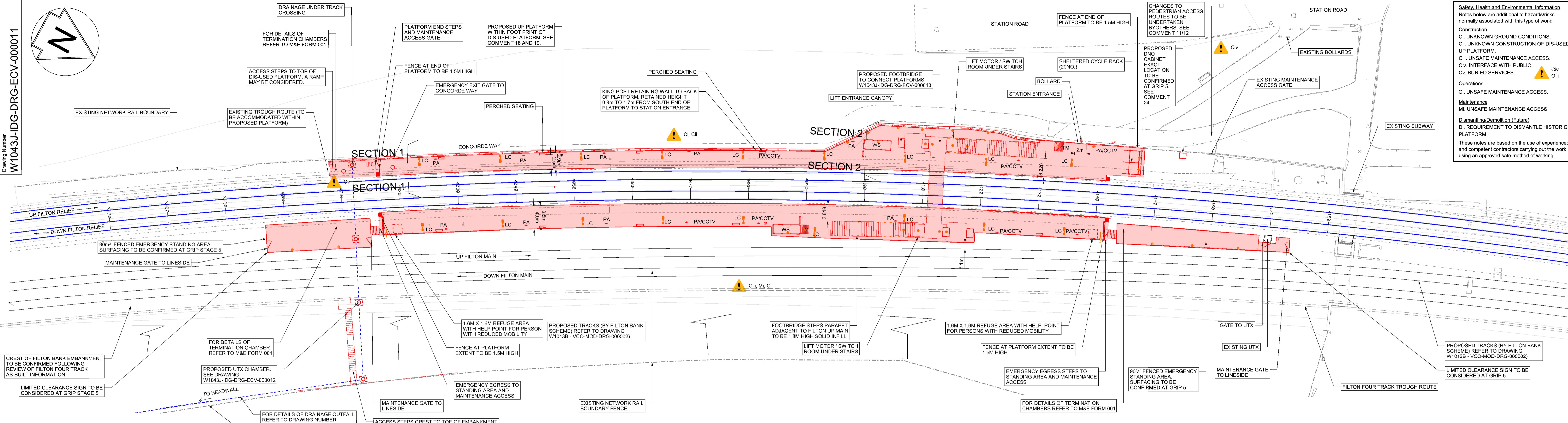
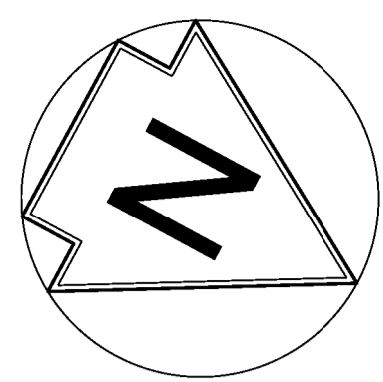
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REFER TO SHEET 3

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WEST OF ENGLAND COMBINED AUTHORITY (WECA)				
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ASHLEY DOWN RAILWAY STATION				
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PROPOSED SITE LAYOUT PLAN				
SHEET 4 OF 4				
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Approved FH	Checked SCN	Designed	Drawn GM	Sheet of
Date 22/04/21	Scale 1:200	Drawing Size A3	Revision v1	3 4



- Legend/Notes**
- CONFIRMATION OF ALL SURVEY DATA MUST BE OBTAINED FROM THE NETWORK RAIL SURVEY TEAM.
 - COORDINATES TO THE REPP12 GRID.
 - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
 - DO NOT SCALE FROM THIS DRAWING.
 - THIS DRAWING IS TO BE PRINTED IN COLOUR. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH:
- W1043J-IDG-MOD-ETR-001003 A01 DATED 13/06/18 ASHLEY DOWN 3D P-WAY MODEL
- W1043J-IDG-MOD-ECV-000001 A01 DATED 13/08/18 ASHLEY DOWN 3D STATION MODEL
- W1013B-VCO-MOD-ESU-000001 A01 DATED 19/01/2016 SITE WIDE TOPO FILTON 4 TRACK
- W1013B-VCO-MOD-ESU-000002 A01 DATED 19/01/2019 SITE WISE OS
- W1073C-NPT-ESU-100006 P01 DATED 01/08/2017
- W1043J-IDG-MOD-ETR-001001 A01 DATED 26/07/18 TRACK HORIZONTAL ALIGNMENT
- W1043E-IDG-MOD-EDS-001003 A04 ASHLEY DOWN STATION LIGHTING PLAN
- HAZARD LOG TO BE READ IN CONJUNCTION WITH DESIGNER'S RISK ASSESSMENT W1043J-IDG-RAR-ECV-001002.
 - PLATFORM DESIGN IS BASED UPON A 6 BAY STEEL MODULAR PLATFORM SYSTEM AND SHOULD BE READ IN CONJUNCTION WITH STANDARD DETAIL NR/CIV/DWG/9900.
 - FORM 001 DRAWINGS TO BE READ IN CONJUNCTION WITH TRACK MAE AND TELECOMS AFRS AND SIGNALING AFRS INTERFACE WITH PROPOSED CABLEING AND THAT OF EXISTING LINESIDE EQUIPMENT DISCUSSED WITHIN MAE FORM 001 AND CABLE ROUTE STRATEGY.
 - THE INTERFACE AT THE STATION ENTRANCE, BETWEEN THE NETWORK RAIL AND MANAGED STATION AND ADJACENT LAND UNDER THE OWNERSHIP OF BRISTOL CITY COUNCIL AND NETWORK RAIL MUST BE CONFIRMED AT DETAILED DESIGN STAGE. REFER TO OPTIONS REPORT W1043J-IDG-REP-ECV-001001 A01 AND FORM 001 W1043J-IDG-REP-ECV-001002 A01.
 - STATION APPROACHES AND GRADIENT OF CONCORDE WAY TO BE REVIEWED AND RE-DESIGNED BY BRISTOL CITY COUNCIL.
 - ENVIRONMENTAL ASSESSMENT TO BE UNDERTAKEN BY CH2M, MANAGED BY WEST OF ENGLAND JOINT TRANSPORT BOARD. ECOLOGICAL SURVEYS AND CONSENTS TO BE ARRANGED BY CONTRACTOR PRIOR TO WORKS COMMENCING, BASED UPON RECOMMENDATIONS MADE WITHIN CH2M REPORT.
 - DRAWING ASSUMES CURRENT DESIGN OF FILTON FOUR TRACK ALIGNMENT. FINAL AS-BUILT ALIGNMENT AND INTERFACE WITH PROPOSED DOWN PLATFORM TO BE CONFIRMED AT DETAILED DESIGN STAGE.
 - PROVISION OF PASSENGER WAITING SHELTER, PLATFORM SEATING AND TICKET MACHINE BASED UPON FEEDBACK FROM MEETINGS WITH GREAT WESTERN RAILWAY (HELD WITH IP WEST OF ENGLAND AREA TEAM).
 - DNO CABINET LOCATION TO BE CONFIRMED DURING GRIP 5 FOLLOWING DETAILED DISCUSSION WITH BRISTOL CITY COUNCIL.
- Notes below are additional to hazards/risks normally associated with this type of work:
- Construction**
- CI. UNKNOWN GROUND CONDITIONS.
 - CII. UNKNOWN CONSTRUCTION OF DIS-USED UP PLATFORM.
 - CIII. UNSAFE MAINTENANCE ACCESS.
 - CIV. INTERFACE WITH PUBLIC.
 - CV. BURIED SERVICES.
- Operations**
- OI. UNSAFE MAINTENANCE ACCESS.
- Maintenance**
- MI. UNSAFE MAINTENANCE ACCESS.
- Dismantling/Demolition (Future)**
- DI. REQUIREMENT TO DISMANTLE HISTORIC PLATFORM.
- These notes are based on the use of experienced and competent contractors carrying out the work using an approved safe method of working.

Rev	Date	Description of Revisions	Drawn	Chkd	Appr	Submittal
A03	17/12/18	FOR FORM 001 ISSUE		AH	JM	DT
A02	06/11/18	USED FOR INTERNAL REVIEW		RM	JM	DT
A01	13/08/18	FORM 001 ISSUE		RM	JM	DT

FOR FORM 001 REVIEW

S3



Project: METROWEST PHASE 2

Drawing Title: ASHLEY DOWN STATION PROPOSED GENERAL ARRANGEMENT AND ELEVATION

Designed	Checked	Approved	Scale(s)	Alternative Reference	Sheet	Date
R.HANDLEY	J.MARTIN	D.TASSELL	As Shown	BSW 2m 43ch	1 of 3	17/12/18

Drawing Number: W1043J-IDG-DRG-ECV-000011

Revision: A03

