

Hampshire Water Transfer and Water Recycling Project Traffic Management Strategy

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Executive summary

1. The Traffic Management Strategy (TMS) outlines the measures to be implemented during the construction of the Hampshire Water Transfer and Water Recycling Project (the 'Project'). The primary objective of the strategy is to minimise the impact and disruption associated with the construction phase of the Project on existing users of the public highway network, including pedestrians, cyclists, public transport users and vehicle drivers.
2. The TMS focuses specifically on the management of roads affected by the construction of the Project. This includes:
 1. Open-cut pipeline crossings across the highway (where trenchless methods are not used).
 2. Creation and removal of temporary accesses for construction compounds and haul roads.
 3. Creation of permanent accesses for the Above Ground Plant and the Water Recycling Plant site.
 4. Off-site highway works required to facilitate access for construction vehicles.
3. To safely and appropriately mitigate construction impacts, the TMS relies on several established methodologies, including maintaining two-way traffic flow wherever possible, road closures as a last resort and night-time working on traffic-sensitive roads. This is in addition to the use of trenchless construction methods, which is a form of embedded mitigation.
4. Relevant stakeholders are considered at the core of mitigation proposed as part of the TMS. Due consideration is given to non-motorised users, who would be protected and prioritised to reflect their position within the road user hierarchy. Vulnerable road users would also be protected, with traffic marshals with Community Safety Accreditation to manage traffic flow and pedestrian safety at works near schools during pick-up/drop-off hours. Public transport operators and emergency services would be notified in advance of works, with appropriate and proportionate provisions outlined for services affected by any works. Additionally, works would be scheduled to avoid key local events or peak seasons for any tourism receptors.

1 Introduction

1.1 Background

- 1.1.1 This Traffic Management Strategy (TMS) has been prepared in support of the proposed Hampshire Water Transfer and Water Recycling Project (the 'Project').
- 1.1.2 The Project is being progressed by Southern Water Services Limited ('the Applicant'). The Applicant is responsible for supplying water and providing wastewater¹ services to over four million customers in the South East of England, operating across Hampshire, Kent, the Isle of Wight and East and West Sussex.

1.2 Management Plans

- 1.2.1 This TMS provides a strategy as to what traffic management would be required and implemented, expected duration of the works, and any calendar and programme restrictions. It also sets out the notice periods for construction works and the responsive traffic management protocols. This TMS has been prepared and submitted as a certified document as part of the DCO application.
- 1.2.2 In addition, three traffic and transport related management plans have been submitted as part of the DCO application. These management plans provide detail on traffic and transport measures to be implemented to effectively manage the construction phase of the Project, and include the following:
1. Framework Construction Traffic Management Plan (Framework CTMP) (Document reference 7.2, DCO Volume 7), setting out how construction traffic will be managed, including hours of traffic movements, traffic routing, safe vehicular access and other ways to minimise traffic impacts. The Framework CTMP also sets out any traffic management measures required to enable access for construction vehicles.
 2. Appended to the Framework CTMP is the Framework Construction Worker Travel Plan (Framework CWTP) (Document reference 7.2, DCO Volume 7). This sets out measures to encourage construction workers to travel by sustainable modes of transport.
 3. Also appended to the Framework CTMP is the Framework Rights of Way Management Plan (Framework RoWMP) (Document reference 7.2, DCO Volume 7), summarising potential Public Rights of Way (PRoW) mitigation measures, such as temporary closures and diversions, that are required as part of the Project.

1.3 Scope of the Traffic Management Strategy

- 1.3.1 This TMS details the traffic management associated with the construction phase of the Project.
- 1.3.2 The Project comprises the following components:

¹ A combination of water from kitchens, bathrooms, sinks and taps (in domestic and non-domestic properties) and rainwater from roads and roofs, that is transported to, and cleaned at, a wastewater treatment works.

1. Water Recycling Plant (WRP) (Work Number 1) and associated pumping stations.
2. Pipelines between Budds Farm Wastewater Treatment Works (WTW) and the WRP site (Pipelines) (Work Number 2).
3. Pipelines between the WRP site and Bedhampton Springs (Pipelines) (Work Number 3), connecting into pipelines being delivered by Portsmouth Water between Bedhampton Springs and Havant Thicket Reservoir.
4. Pipeline between the Water Recycling Plant site and Otterbourne Water Supply Works (WSW) (Work Number 4).
5. Above Ground Plant (AGP) (Work Number 5), comprising Intermediate Pumping Stations (IPS) and Break Pressure Tanks (BPT) located along the Pipeline between the WRP site and Otterbourne Water Supply Works.

1.3.3 The Project would also comprise the use of the following infrastructure:

1. Havant Thicket Reservoir (which has been consented separately by Portsmouth Water and is currently under construction) for the storage of recycled water.
2. The existing Eastney Long Sea Outfall, Eastney Pumping Station, and associated Eastney Transfer Tunnel for the release of reject water from the WRP site.
3. Pipelines and other related works (which have been consented separately by Portsmouth Water) for the transfer of recycled water and source water between Bedhampton Springs and Havant Thicket Reservoir.

1.3.4 The construction and operation of the Project would be supported by other temporary and permanent works.

1.3.5 The Project would require the demolition, disassembly and/or temporary relocation of a number of small structures.

1.3.6 A detailed description of the Project can be found in ES Chapter 3 Description of the Proposed Development, Volume I (Document reference 6.1, DCO Volume 6).

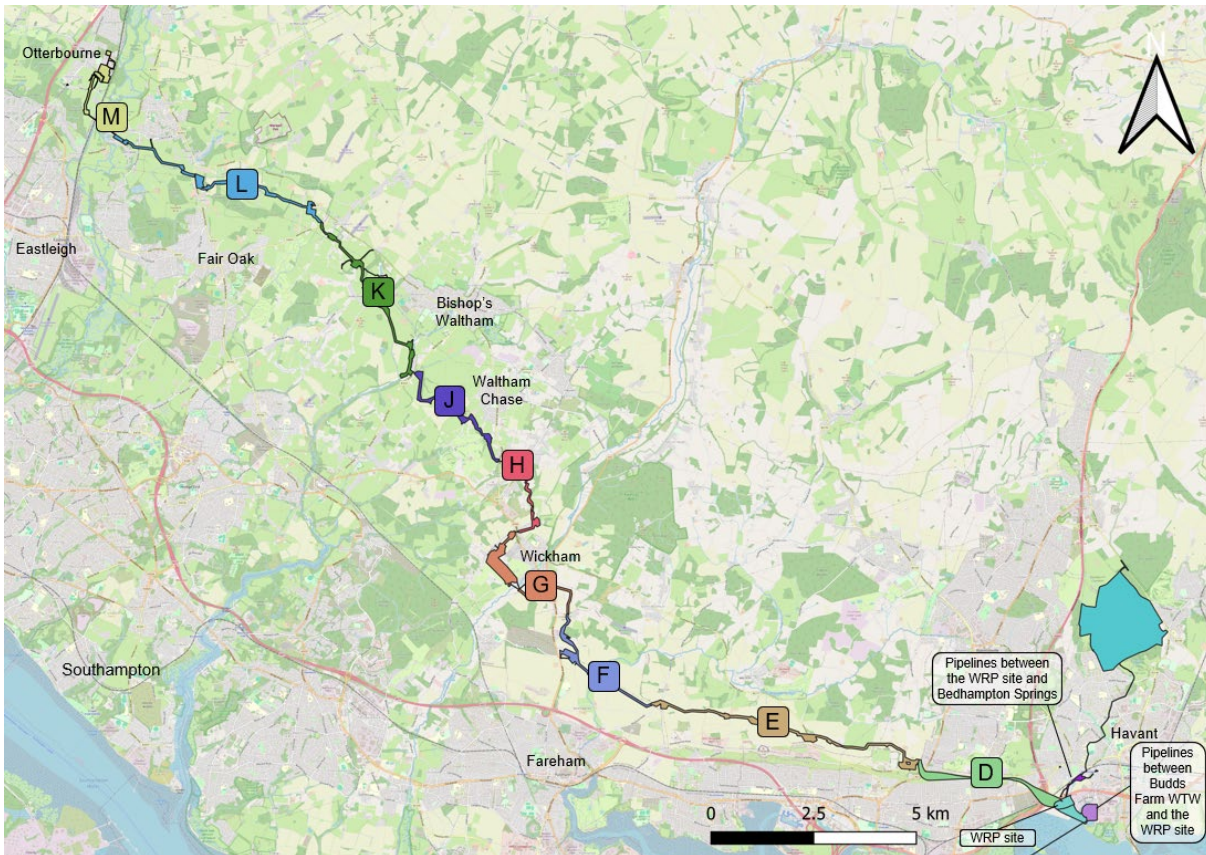
1.3.7 Impacts associated with construction transport to and from temporary construction compounds, AGP and the WRP site are covered within the Framework CTMP (and appended Framework CWTP) and has been submitted as part of the DCO application documents.

1.3.8 This document focuses on the traffic management that would be needed on public roads, including where temporary lane or road closures would be required. Traffic management is anticipated to be required as a result of the following elements of the Project:

1. Construction of the Pipeline across the public highway, where trenchless construction works are not proposed.
2. Creation and removal of temporary construction compound accesses and temporary haul road accesses associated with the Pipeline.
3. Creation of the permanent accesses associated with the AGP and WRP site.
4. Off-site works required to facilitate access to temporary construction compounds or other Project components.

1.3.9 The Pipeline has been divided into sections, as set out in Graphic 1-1.

Graphic 1-1 Pipeline sections overview



1.4 Strategy objectives

1.4.1 This TMS has the primary objective of minimising impact and disruption to existing users of the public highway network in the vicinity of the Pipeline during the construction phase.

1.4.2 It is proposed for this overarching objective to be achieved by the following:

1. Traffic management measures to facilitate temporary lane and road closures, minimising as far as is safe and practicable having regard to the proposed pipeline construction methodology, road and lane closures.
2. Providing adequate notice to the public ahead of construction works.
3. Effectively communicating the planned works to road users and the general public.
4. Accommodating non-motorised users (NMUs) and providing alternative walking and cycling routes where required.
5. Equestrians on roads would follow the measures set out within this strategy. Specific measures for equestrians travelling on bridleways are contained within the Framework RoWMP (Document reference 7.2, DCO Volume 7).
6. Taking special measures to cater for the needs of vulnerable road users (such as the elderly, school children and people with disabilities) in the vicinity of construction works.

7. Responding to changes in traffic conditions (such as a road traffic collision, emergency event or other unforeseen event) and enabling appropriate access for emergency vehicles.
8. Ensuring the safety of road users (including NMUs) in the vicinity of lane and road closures as far as reasonably practicable.

1.5 Structure of the Strategy

1.5.1 The remainder of the Strategy is structured as follows:

1. Section 2 sets out the traffic management principles that inform the Strategy
2. Sections 3 - 12 provide detail on the traffic management measures that will be implemented on roads contained within each section of the Pipeline
3. Section 13 summarises the TMS.

2 Traffic management principles

2.1 Introduction

2.1.1 The TMS has been developed with the aim of minimising disruption to all road-users, including pedestrians, cyclists, public transport users and car drivers utilising the public highway. This section sets out the principles that will be followed by Contractors during the construction of the Pipeline.

2.2 New Roads and Streets Works Acts 1991

2.2.1 All street works in the highway associated with the Project are to be carried out in accordance with any permit scheme under the New Roads and Street Works Act (NRSWA) [1] where such a permit scheme applies.

2.2.2 The design of highway accesses and other alterations to the public highway will be approved pursuant to the relevant DCO requirements. These would not be governed through the NRSWA Permit Scheme as they do not relate to street works.

2.3 Traffic management methodology

Overview

2.3.1 Traffic management measures will have regard to the guidance included in the following documents to ensure the safety of all road-users and construction workers:

1. New Roads and Street Works Act 1991: Code of Practice of Co-ordination of Street Works and Works for Road Purposes and Related Matters [2]
2. Safety at Streetworks and Roadworks: A Code of Practice [3]
3. Traffic Signs Manual Chapter Eight: Traffic Safety Measures and Signs for Roadworks and Temporary Situations [4].

2.3.2 Based on this guidance, the following assumptions have been used to inform the traffic management requirements of the construction process:

1. Where road closures are required, arrangements to retain access to properties and other facilities will be made.
2. The construction corridor working width for the Pipeline at road crossing locations will be up to 20m.
3. It is assumed that the length of construction works associated with the construction of temporary and permanent accesses will be 30m. There may be some additional works to clear vegetation and provide sufficient visibility splays beyond this.
4. The following timeframes will apply for road/lane closures associated with the Project:
5. Road crossings – expected to last seven days with an allowance for a maximum of 21 days.

6. Minor temporary access construction and removal – construction and removal each expected to last seven days with an allowance for up to 21 days.
7. Major temporary access construction and removal - construction and removal each expected to last 14 days with an allowance for up to 28 days.
8. Temporary haul road access construction and removal – construction and removal each expected to last seven days with an allowance for up to 21 days.
9. AGP and WRP accesses construction – expected to last 14 days with an allowance for up to 28 days.
10. Minor road widening and changes to stop lines at existing junctions – expected to last 14 days with an allowance for up to 28 days.
11. Temporary works to pedestrian refuge islands – expected to last seven days with an allowance for a maximum of 14 days.

2.3.3 Taking these assumptions into account, the following overall principles have been applied in the creation of traffic management measures for the construction works associated with the Pipeline:

1. Two-way traffic flow should be maintained wherever safe and practicable. Where this is not safe or practicable, one-way flow should be maintained and this may need to be facilitated by shuttle working, temporary traffic signals and lane closures.
2. Full road closures should only be considered as a 'last resort' measure where it is not safe or practicable to maintain full or partial traffic flows, and where full road closures are required, the construction programme should seek to minimise disruption where possible.
3. Traffic management measures should provide for sustainable modes, ensuring that safe and convenient routes are provided for those walking, cycling and using public transport, where feasible and within the powers available under the Order.
4. Night-time working will be considered for busier roads affected by the Project, as detailed in section 2.4.

Traffic management measures

2.3.4 This section provides details of the various traffic management measures that will be implemented to mitigate the impacts of construction operations associated with the Pipeline. Traffic management measures are not required where trenchless construction works and tunnelling methods are used for the construction of the Pipeline, which is a form of mitigation embedded within the design of the Project that minimises its impacts on the public highway.

2.3.5 This section focuses on measures associated with motor vehicles. Information on management measures for those walking and cycling is provided in section 2.9 and for public transport in section 2.10. As noted in section 1.4, horse riders on roads would follow the measures set out within this strategy for motor vehicles.

2.3.6 Appropriate traffic management measures have been developed with reference to Chapter Eight of the Traffic Signs Manual [4]. This document sets out the factors

affecting the choice of traffic control, which are summarised in the context of single carriageway roads in Table 2-1:

Table 2-1 Factors affecting the choice of traffic control method on single carriageway roads (Traffic Signs Manual, Department for Transport, 2009)

Method	Maximum speed limit (mph)	Length of coned area	Maximum traffic flow	Minimum width (cars and LGVs)
Two-way working	-	-	-	5.5m
Shuttle working with traffic control	-	-	-	2.5m
'Give and take'	30	50m (max)	400 veh/hr and 20 HGV/hr	-
Priority signs	60	80m (max)	840 veh/hr	-
'STOP/GO' signs	60	100m 200m 300m 400m 500m	1400 veh/hr 1260 veh/hr 1060 veh/hr 940 veh/hr 840 veh/hr	-
Portable traffic signals	60	300m (max)	300m (max)	-
'STOP-WORKS'	60	N/A	N/A	-

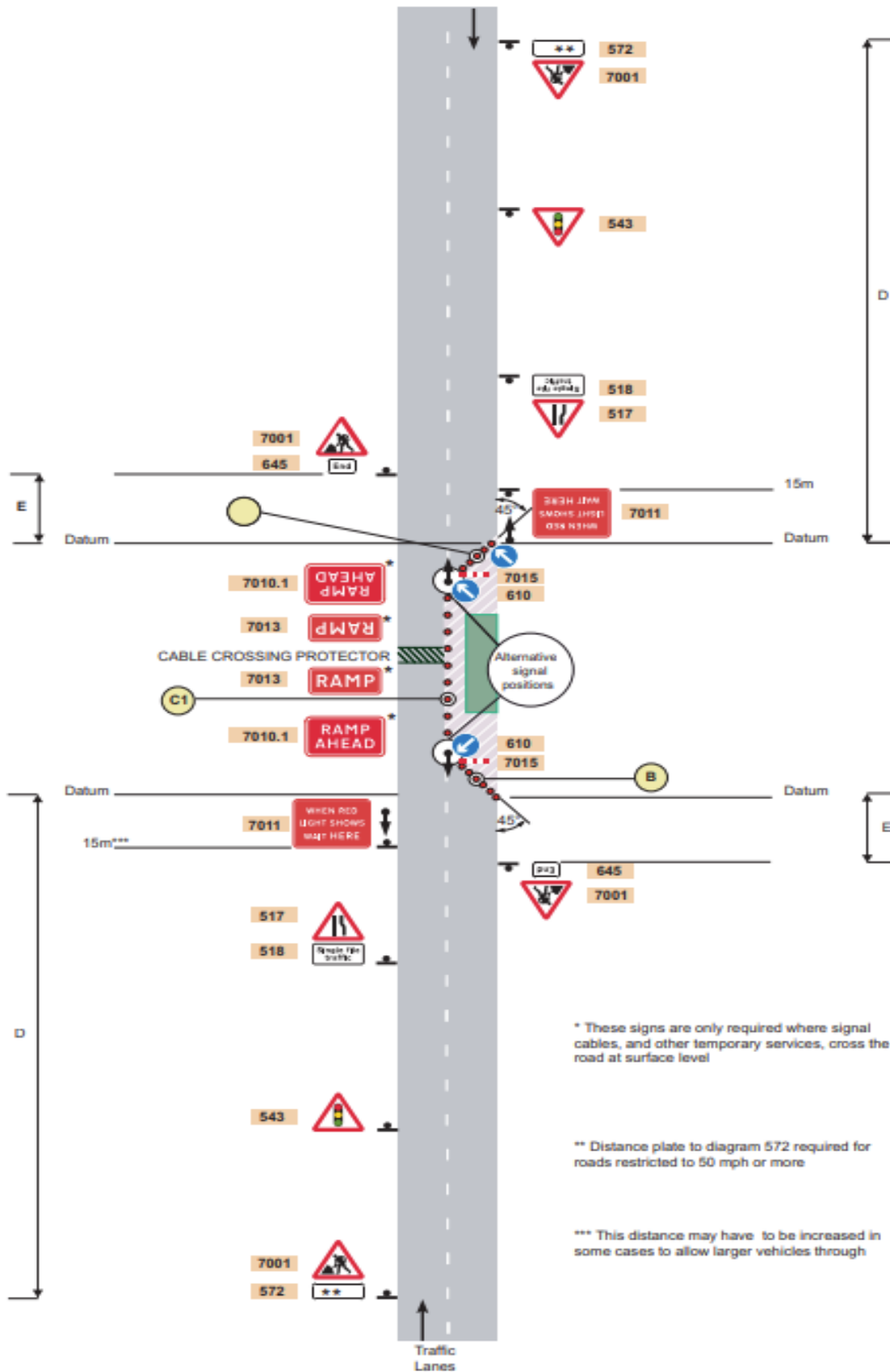
2.3.7 Relevant traffic control methods pertaining to dual carriageway roads have also been considered where appropriate, despite there not being a dual carriageway road affected by the Project. This is because this form of traffic management is appropriate for the A32 Hoads Hill, which contains two lanes southbound and one lane northbound at the affected location. This form of traffic management involves the use of contra-flow operation whereby one carriageway of a dual carriageway road is to be operated temporarily to carry two-way traffic. Additional detail on this traffic management method is provided within this section.

Lane closures with two-way shuttle working using temporary traffic signals

2.3.8 This form of traffic management will be employed at locations where the affected roads are single carriageway, bi-directional routes with a speed limit above 30mph. Lane closures allow two-way traffic flows to continue beyond the construction zone along the lane that is kept open during construction works. Use of the open lane by traffic will be controlled by a set of temporary traffic signals.

2.3.9 Graphic 2-1 is an extract from Chapter Eight of the Traffic Signs Manual [4] showing the typical arrangement of lane closures with two-way shuttle working using temporary traffic signals.

Graphic 2-1 Typical arrangement: Lane closures with two-way shuttle working using temporary traffic signals (Chapter Eight of the Traffic Signs Manual, Department for Transport, 2009)



- 2.3.10 As per guidance set out within Chapter Eight of the Traffic Signs Manual, where two-way shuttle working is installed, the minimum lane width past the construction zone will be 3.0m on routes used by buses or Heavy Goods Vehicles (HGVs).
- 2.3.11 Though not applicable to schemes in Hampshire or Portsmouth, Transport for London (TfL) guidance and policy is generally regarded as industry-leading. TfL’s Temporary Traffic Management Handbook [5] contains guidance which states that “NARROW LANE DO NOT OVERTAKE CYCLISTS” signage should be provided where lane widths are between 3.0m and 3.5m. This measure would be used by the Contractor where practicable.
- 2.3.12 Lane widths between 3.5m and 4.0m are considered less safe for cyclists given that this width may appear to drivers as though there is adequate width for a motor vehicle to safely overtake a cycle. As such, a lane width of 3.5m-4.0m can result in unsafe overtaking manoeuvres. Lanes of this width will be avoided as a traffic management measure by the Contractor.
- 2.3.13 Lane widths greater than 4.0m are preferable and will be provided where practicable and road widths allow.
- 2.3.14 For routes which are lightly trafficked, and only used by cars and Light Goods Vehicles (LGVs), the minimum lane width may be reduced to 2.5m according to Traffic Signs Manual guidance. As noted in section 2.3.11, “NARROW LANE DO NOT OVERTAKE CYCLISTS” signage would be provided where lane widths are reduced to between 2.5m and 3.0m.
- 2.3.15 A summary of the traffic management practices for areas where there will be two-way shuttle working that will be applied for the Project is set out at Table 2-2.

Table 2-2 Traffic Management practices to be adopted for two-way shuttle working

Road Traffic Profile	2.5-3.0m	3.0m-3.5m	3.5m-4.0m	4.0m+
Accommodates buses or HGVs	x	✓	x	✓
Accommodates cars and LGVs only	✓	✓	x	✓

- 2.3.16 Chapter Eight of the Traffic Signs Manual [4] advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction.
- 2.3.17 It is anticipated that the temporary traffic signals will operate in Vehicle Actuated (VA) mode during off-peak periods. This means that detectors will monitor traffic flows and adjust the length of green time to reduce delays. During peak periods the signals will likely be manually controlled by appropriately qualified construction workers. This will allow traffic flow and queue lengths to be monitored, allowing for manual adjustments to the signal timings to manage and control traffic flows and queues.

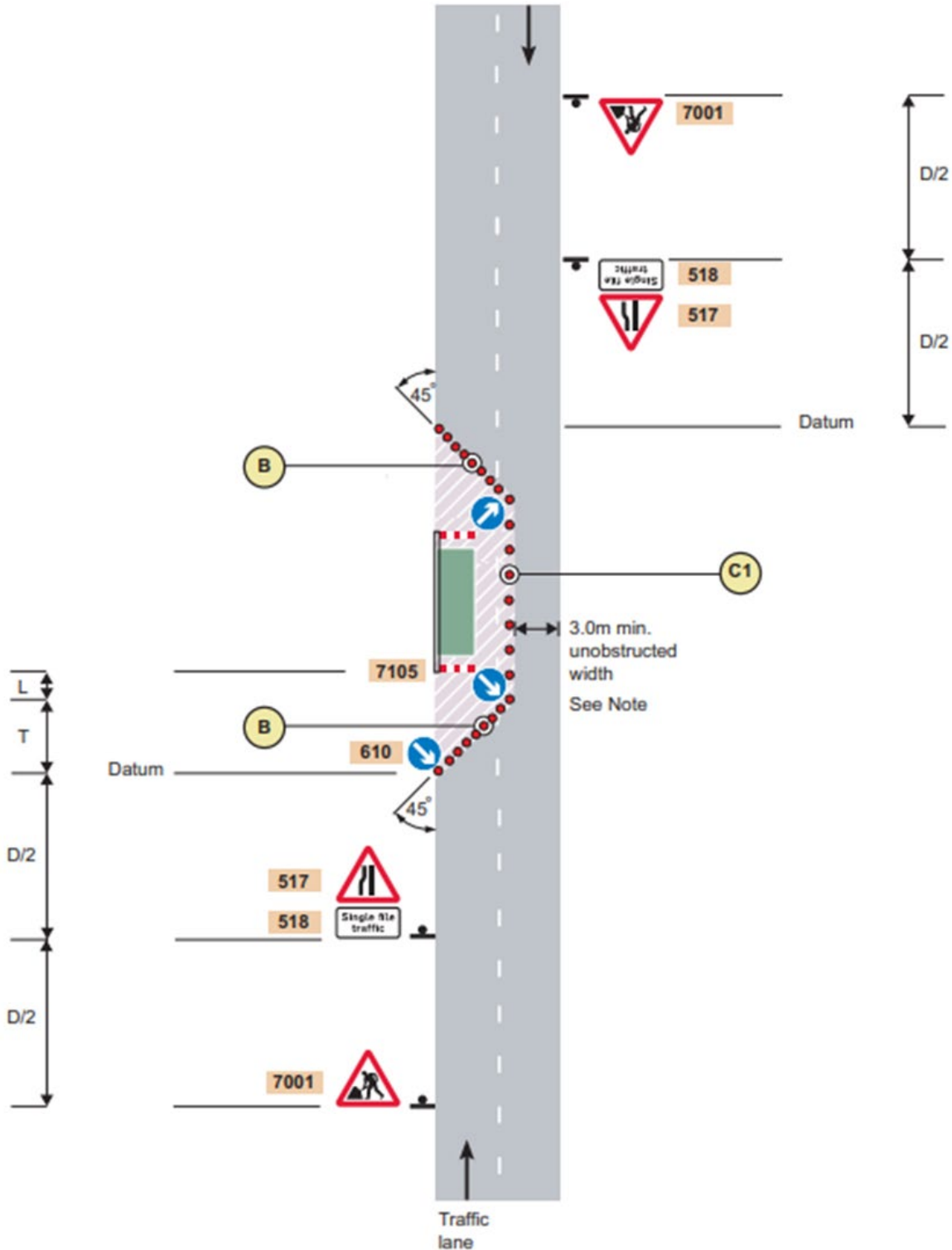
Lane closures with a ‘GIVE/TAKE’ system

- 2.3.18 This form of traffic management will be employed at locations where the affected road is a minor, single carriageway, bi-directional route with a speed limit of 30mph

or less. It is also required that drivers approaching from either direction can see 50m beyond the end of the works, and that the length of the works from the start of the lead-in taper to the end of the exit taper is 50m or less.

- 2.3.19 Lane closures allow two-way traffic flows to continue beyond the construction zone along the lane that is kept open during construction works. Drivers take turns to pass the roadworks when it is clear and safe to do so, using their discretion to decide when to proceed.
- 2.3.20 Graphic 2-2 is an extract from Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) which shows the typical arrangement of 'GIVE/TAKE' traffic control.

Graphic 2-2 Typical arrangement: 'Give and take' system on a single carriageway road with a permanent speed limit of 30mph or less (Chapter Eight of the Traffic Signs Manual, Department for Transport, 2009)



2.3.21 To enact 'GIVE/TAKE' traffic management, two advance signs are required, including a 'road works' sign and a 'road narrows' sign on the near side in both directions. A 'single file traffic' plate is also required.

- 2.3.22 Tapering is also required, and a 'keep left/right' sign should be placed at the near side of the start of the taper as well as a 'lane closed' barrier with a 'keep left/right' sign at the end of the taper. Coning should also be used to mark the edge of the works area safety zone.

Traffic management at signal-controlled junctions

- 2.3.23 Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) contains detail on how traffic management measures should be enacted when road works are required in the vicinity of signalised junctions.
- 2.3.24 Guidance suggests that, where the capacity of an approach to the junction is reduced, consideration should be given to adjusting the signal timings to minimise queue lengths on this approach.
- 2.3.25 Some situations may require that the permanent signals are switched off temporarily to allow traffic to be controlled by a multiphase portable signal or by manual control methods.
- 2.3.26 Traffic joining the signal-controlled area should receive advance warning in the form of 'TRAFFIC UNDER SIGNAL CONTROL' signage alongside a 'road works' sign.

Road closures

- 2.3.27 At locations where these traffic management measures are not deemed to be safe and practicable, road closures will be considered as a 'last resort' to facilitate construction works as set out in paragraph 1.4.2.
- 2.3.28 Road closures associated with the construction phase of the Project will be discussed with the police and appropriate highway authority prior to the road closure as per guidance contained within the Traffic Signs Manual [4] and in accordance with the provisions of the draft DCO.
- 2.3.29 Suitable diversion routes will be identified and planned in conjunction with the LHA, accounting for the suitability of the diversionary route for the expected traffic flows. Comprehensive directional signage will be provided to facilitate diversion traffic and non-motorised user (NMU) movements in line with Chapter Eight of the Traffic Signs Manual [4] guidance.

Contra-flow operation

- 2.3.30 Contra-flow operation will be used at locations where the Pipeline will affect a dual carriageway route. Contra-flow systems involve the operation of one carriageway of a dual carriageway road temporarily to carry two-way traffic.
- 2.3.31 Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) states that physical lane separation should be provided in the form of a buffer zone or a temporary vertical restraint safety barrier.
- 2.3.32 Contra-flow sections of road are typically subject to a 50mph speed limit and should follow signage guidance as set out in Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009).

2.4 Night-time working

- 2.4.1 During initial discussions, HCC has requested that night-time working is considered for affected roads that are considered to be traffic-sensitive. This measure will be taken to minimise the impact of construction works on daytime traffic, reducing congestion, delay and queueing.
- 2.4.2 Night-time working could therefore be considered on the following links and junctions:
1. Harts Farm Way
 2. B2177 Southwick Road
 3. A32 Hoads Hill
 4. B3035 Botley Road
 5. B2177 Winchester Road
 6. B3037 Mortimers Lane
 7. B2177 Portsmouth Road
 8. B3354 Winchester Road
 9. B3335 Highbridge Road
 10. B2177 Bedhampton Road/Brookside Road staggered priority junction
 11. A334 Winchester Road/Blind Lane/Titchfield Lane signalised junction
 12. Otterbourne Hill/Kiln Lane/Otterbourne Road mini-roundabout
- 2.4.3 In any circumstance, night-time working will be limited to a maximum of 10 days within a 15 day period to minimise noise disruption.

2.5 Notice periods for construction works

- 2.5.1 The detailed design of all highway accesses will be approved pursuant to the DCO requirements.
- 2.5.2 For street works, Provisional Advance Authorisations may be applied for and obtained at least three months prior to works that include the laying of the Pipeline under streets at a location commencing. This will be done to ensure that works are co-ordinated and firmly scheduled in advance.
- 2.5.3 The relevant LHA will be notified of each individual traffic management measure. For street works, the Contractor would be expected to comply with the standard requirements of the Permit Scheme.

2.6 Construction programme

- 2.6.1 An indicative construction programme for the works associated with the Pipeline has been developed with regard to environmental constraints, public events, school terms and public holidays.
- 2.6.2 The detailed TMS documents will be updated post-consent to consider ecological seasons that will influence the construction programme of the Project. Examples of these events include:

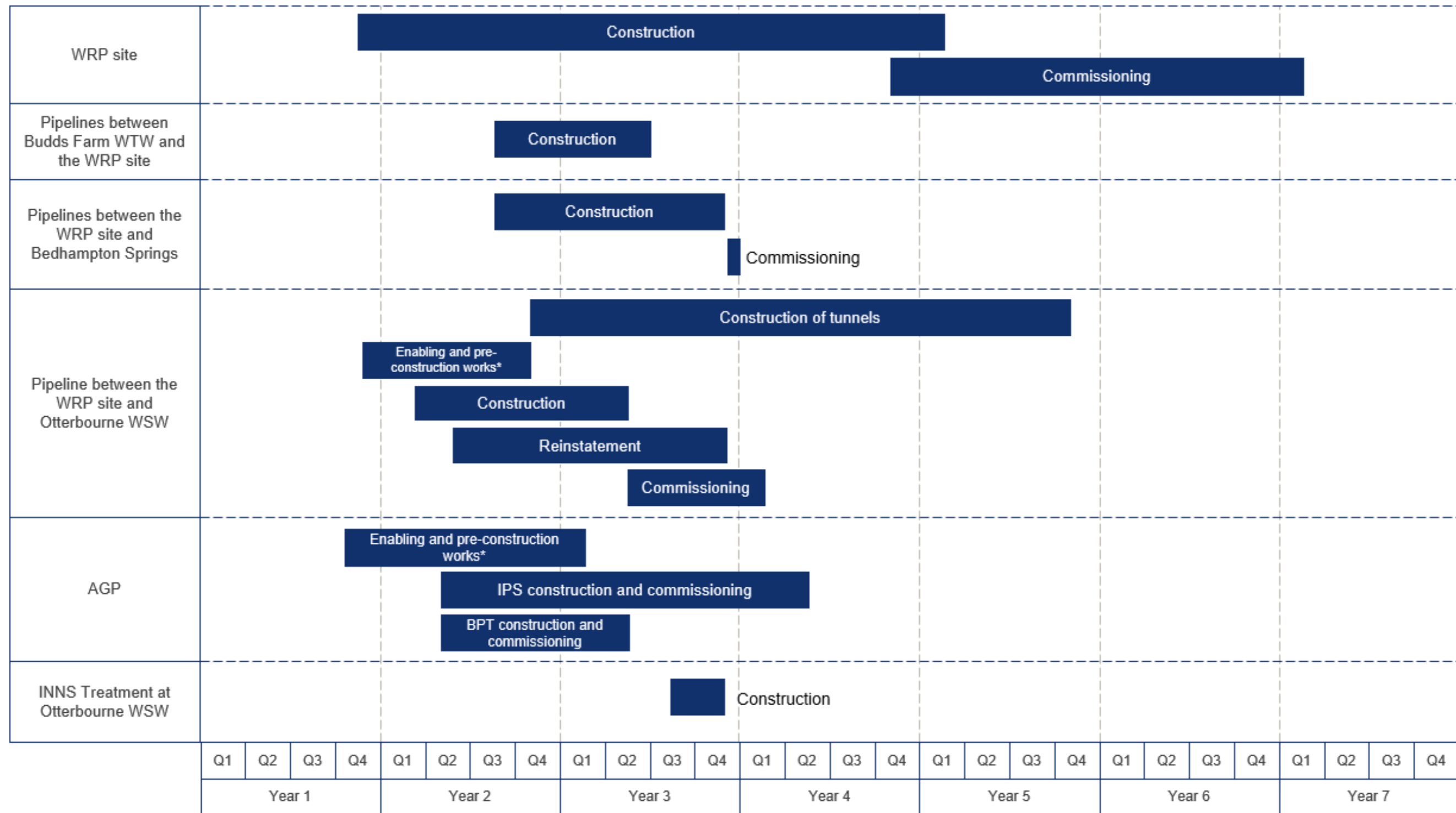
1. Badger breeding season (January to March)
2. Bird breeding and nesting season (March to August)
3. Wintering bird season (October to March).

2.6.3 The following public events have also been taken into consideration when developing the TMS:

1. Dubs South Campout at North Boarhunt
2. Wickham Festival
3. Wickham Horse Fair
4. Marwell Zoo peak season (including school holidays) and Christmas GLOW events.

2.6.4 The indicative construction programme for the Pipeline is set out in the Graphic 2-3.

Graphic 2-3 Indicative construction programme



* Enabling and pre-construction works including: site clearance and preparation, crossings of major utilities, construction compounds and trenchless compounds.

- 2.6.5 In addition to the constraints set out, the indicative construction programme has been developed with reference to the geographical proximity of separate works associated with the Pipeline. Works will be scheduled so that multiple on-road construction zones within the immediate vicinity of one another will be avoided to allow for appropriate diversion routes, as detailed within the specific measures outlined from sections 3 to 12. Works would also be co-ordinated through the HCC Permit Scheme to reduce potential cumulative impacts with other works in the public highway.
- 2.6.6 The proposed construction programme will mitigate the impact of construction works on the local highway network.

2.7 Stakeholder and Customer Communications Plan

- 2.7.1 Communication of traffic management is integral to maintaining traffic flow and minimising congestion within the local highway network. An overview of the Stakeholder and Customer Communications Plan is set out in the Outline Construction Environmental Management Plan (CEMP) (Document reference 7.1, DCO Volume 7).
- 2.7.2 Communication with stakeholders is an important aspect of the Project. In relation to traffic management, the Stakeholder and Customer Communications Plan, as referenced in section 4.8 of the Outline CEMP (Document reference 7.1, DCO Volume 7), will provide various mechanisms to ensure that road users are aware of any changes to the road network and can adjust their journeys accordingly.

2.8 Signage strategy

- 2.8.1 A signage strategy will be developed to communicate proposals to road users who may be otherwise unaware of the construction works and associated traffic management. This strategy will help to ensure that traffic is reassigned away from the construction zone onto other, unaffected roads within the local highway network.
- 2.8.2 The signage strategy will be developed with reference to the following:
1. The location of signage across the wider highway network will inform drivers of the construction works and allow them to re-route well before reaching the construction zones associated with the Pipeline.
 2. The location of additional signage in the vicinity of or on the Pipeline corridor, allowing drivers to re-route in close proximity to the works.
 3. Signage to direct and encourage the use of appropriate alternative routes to avoid the construction works.
 4. Signage to discourage the use of routes which are inappropriate for reassignment of traffic away from the works.
- 2.8.3 The location and positioning of signage in relation to the works will be carried out in accordance with Chapter Eight of the Traffic Signs Manual [4].
- 2.8.4 The location and full details of all signs will be agreed with the relevant authority as part of the submission of the detailed TMS documents prepared by the

Contractor prior to the implementation of the strategy. This final strategy will be agreed through the Permit Process.

- 2.8.5 As part of the submission of the detailed TMS documents to the relevant authorities, the Contractor will be required to confirm the provision of temporary signs (such as white on red or black on yellow) to encourage positive user behaviour to mitigate possible safety problems in the vicinity of the Pipeline. Examples include 'Keep Clear', 'Merge in Turn' and 'Do Not Overtake Cyclists', the locations of which are dependent upon the exact location of the traffic management at any one time.

2.9 Pedestrians and cyclists

- 2.9.1 As per guidance contained within Chapter Eight of the Traffic Signs Manual [4], detailed consideration will be given to pedestrians and cyclists as well as other vulnerable road users when designing and implementing traffic management measures. This will ensure that any impact on these users is minimised and that alternatives exist for them.
- 2.9.2 Where any physical measures are required to facilitate walking and cycling trips through areas that are impacted by the construction works, physical measures will be installed immediately prior to the commencement of works, and removed immediately following the completion of the works to minimise the amount of time that non-motorised users are affected.

Pedestrians

- 2.9.3 Where construction works impact a footway to the extent that it is unusable, temporary barriers would be provided with a minimum width of 1.0m between the construction zone and the carriageway to facilitate pedestrian use. Slip-resistant ramps to allow wheelchair and scooter users to move between the footway and the carriageway will be provided, and if possible a platform will also be stationed adjacent to the ramp at kerb-level to allow these users to turn 90 degrees prior to using the ramp.
- 2.9.4 For locations where it is not possible to provide the minimum sufficient width of 1.0m, a convenient alternative route should be provided alongside appropriate signage.
- 2.9.5 Crossing points should be temporarily restricted by barriers and signage if they are no longer appropriate due to the construction works. Signage should also be provided at crossing points if traffic movements have been fundamentally changed as a result of the construction works.
- 2.9.6 There may be some cases where temporary footway closures are required to facilitate the construction works. In the majority of cases, this disruption will be managed through the provision of alternative footway links, however in locations where this is not possible, the following will apply:
1. Construction operatives will be made available to assist users past the works.
 2. Temporary footway closure signs will be provided at the location of the works.

- 2.9.7 Access to PRow affected by construction works is considered within the Framework RoWMP (Document reference 7.2, DCO Volume 7) submitted as part of the DCO application documents.

Cycling

- 2.9.8 Where existing cycle provision (such as cycleways) exists at areas affected by the construction works, efforts should be made to keep these open or provide an appropriate alternative during the works.
- 2.9.9 According to TfL's Temporary Traffic Management Handbook [5], "NARROW LANE DO NOT OVERTAKE CYCLISTS" signage should be used when lane widths range between 3.0m and 3.5m. Lanes between 3.5m and 4.0m should also not be provided given that these may result in cars attempting to overtake cyclists using an unsafe manoeuvre.
- 2.9.10 Given that cyclists are particularly vulnerable to uneven surfaces, drains and gulleys, provision should be made to ensure that routes for cyclists are level and in good condition.
- 2.9.11 In some cases, the width of the road may mean that it is not possible to provide an alternative cycle route with sufficient width. In these circumstances, 'Cyclists dismount and use footway' signs will be used for short sections as a last resort.

2.10 Public transport

- 2.10.1 During the construction phase of the Project, some existing bus stops may need to be closed to facilitate construction works. At locations where this is required, a temporary bus stop will be provided as close as possible to the original location, accounting for the highway safety of all road users.
- 2.10.2 Applications to temporarily suspend any existing bus stops will follow the HCC formal application process. The location of any temporary bus stops will be agreed with HCC prior to the preparation and submission of the detailed TMS documents post-consent.
- 2.10.3 Where construction works impact existing bus routes, bus operators will be made aware in advance of the works so that they are able to notify customers and warn them of any potential delays. On these routes, lane widths in the vicinity of temporary works will also be made sufficient to accommodate the width of a bus.

2.11 School access

- 2.11.1 Special care must be taken where works are situated in the vicinity of schools. Extra measures will include the provision of additional signage and traffic marshalling to assist with the safe management of traffic flow and pedestrians in the immediate vicinity of school accesses.
- 2.11.2 Restrictions will apply to construction traffic movements in the vicinity of schools during school pick-up and drop-off times as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7).

- 2.11.3 These traffic marshals, who will be appointed by the Contractor, will hold authority through the Community Safety Accreditation Scheme to stop or divert traffic during construction in order to reduce delays and ensure the safety of the travelling public.

2.12 Property access

- 2.12.1 It is not anticipated that the proposed traffic management measures would impact access to many properties. Coordination of traffic management measures would typically ensure that properties can be accessed via alternative routes.
- 2.12.2 However, a small number of properties that are either located on no through route roads or are in close proximity to traffic management would be affected. For these properties, specific measures will be implemented to ensure that residents can continue to access their properties.
- 2.12.3 These measures will include mitigation such as temporary plates to provide vehicular access, or the creation of temporary tracks for out of hours access.
- 2.12.4 An out of hours communication line will also be provided to ensure that residents have a point of contact should any issues arise as detailed in section 2.7.

2.13 Responsive traffic management protocol

- 2.13.1 The TMS will be a 'live' strategy, meaning that it will be responsive to traffic conditions and events that may impact upon the construction works or the capacity of the local highway network. Any adjustments to the TMS made based on these factors will be developed in liaison with the relevant LHA as appropriate. Examples of this responsive traffic management protocol include:
1. A protocol to temporarily suspend and remove construction works or alter traffic management strategies should a road traffic collision, emergency event or other unforeseen event take place at a location that would either affect a road subjected to traffic management measures or a road that could be classed as an alternative route to that impacted by traffic management measures.
 2. Responsive management of traffic signals at signalised junctions along impacted routes.
 3. Provision of traffic marshalling around schools located in the vicinity of impacted routes to mitigate the impact of traffic.
 4. Protocol to provide revised temporary signage or utilise temporary Variable Message Signs to redirect traffic away from inappropriate routes.
- 2.13.2 Similarly, the continuous monitoring process will feed into the responsive traffic management protocol. Aspects of the TMS that are operating unsatisfactorily may be adjusted in liaison with the relevant LHA to enable better outcomes for all road users.
- 2.13.3 A road safety officer (or similar) will be appointed to oversee the implementation of both the CTMP and the TMS, including the monitoring process. A contact number for this operative will be provided for the public to raise any concerns that they may have with the TMS (and CTMP).

2.14 Emergency services

- 2.14.1 Each construction location zone will be set up to ensure that access by emergency vehicles is achievable. For construction areas where lane closures with two-way shuttle working will be in operation, a protocol will be set up which will either include an 'all-red' phase to clear the shuttle lane of any traffic, or an 'extended green' phase which enables the emergency vehicle to pass through.
- 2.14.2 The majority of road closures associated with the Project are rural country lanes that have suitable alternative diversion routes which will not significantly impact emergency response times. Construction works will be phased, meaning that road closures will not take place on proximate roads at the same time so that access to these alternative routes can be maintained. These diversion routes will also be well-signposted.
- 2.14.3 At road closure locations where this is not the case, road plates will be available at the construction zone which can facilitate emergency access. At the end of the day, road plates would be installed to allow for out of hours emergency access only.
- 2.14.4 Emergency services will be informed immediately prior to the commencement of works at specific locations and immediately following their completion. The detailed TMS documents will outline the relevant procedures to be followed by both parties with regard to the dissemination of information and how emergency access will be safeguarded and delivered through each individual phase.

2.15 Royal Mail

- 2.15.1 As part of the stakeholder engagement with Royal Mail, the following has been requested to be included in the Stakeholder and Customer Communications Plan:
1. Royal Mail is notified by the Applicant or its contractors at least one month in advance on any proposed road closures, diversions and alternative access arrangements, and informed of the hours of working.
 2. Where road closures/diversions are proposed, the Applicant or its contractors should liaise with Royal Mail at least two months in advance to identify and make available alternative highway routes for operational use to ensure access is maintained to delivery points, post offices and post boxes, and that key connections are not missed, or otherwise allow Royal Mail sufficient time to put alternative arrangements in place.
 3. A mechanism that informs Royal Mail about any other works affecting the local highways network (having regard in particular to the identified operational Royal Mail properties in the area surrounding the pipeline and associated works).
 4. Royal Mail would received monthly update (by email) to confirm the planned traffic management, including any changes that may have arisen since previously engaged.
- 2.15.2 The Stakeholder and Customer Communications Plan is outlined in the CEMP (Document reference 7.1, DCO Volume 7) and will be developed post-consent as part of the detailed CEMP. This Plan will need to detail how and when

stakeholders, including the Royal Mail, are informed of road closures and diversions. This would include the communication outlined in paragraph 2.15.1.

2.16 Specific traffic management measures

- 2.16.1 The following sections (sections 3 to 12) set out the specific traffic management measures to be implemented at each location where roads are affected by the Project.
- 2.16.2 The measures proposed within these sections are based on the current scheme design and are therefore subject to change.
- 2.16.3 Final, specific traffic management measures will be confirmed within the detailed TMS documents submitted post-consent.

2.17 Traffic management restrictions

- 2.17.1 Sections 3 to 12 set out the proposed traffic management practices that will be used as part of the Project.
- 2.17.2 In addition to setting out the traffic management practices, these sections provide detail on temporal restrictions that will apply to the scheduling of works. This accounts for items such as those outlined in section 2.6, as well as other considerations that may affect the ability to carry out works appropriately.
- 2.17.3 The tables contained within these sections contain a schedule of when calendar restrictions would apply to works. This schedule uses a RAG rating as defined in Table 2-3.

Table 2-3 Calendar restriction RAG rating

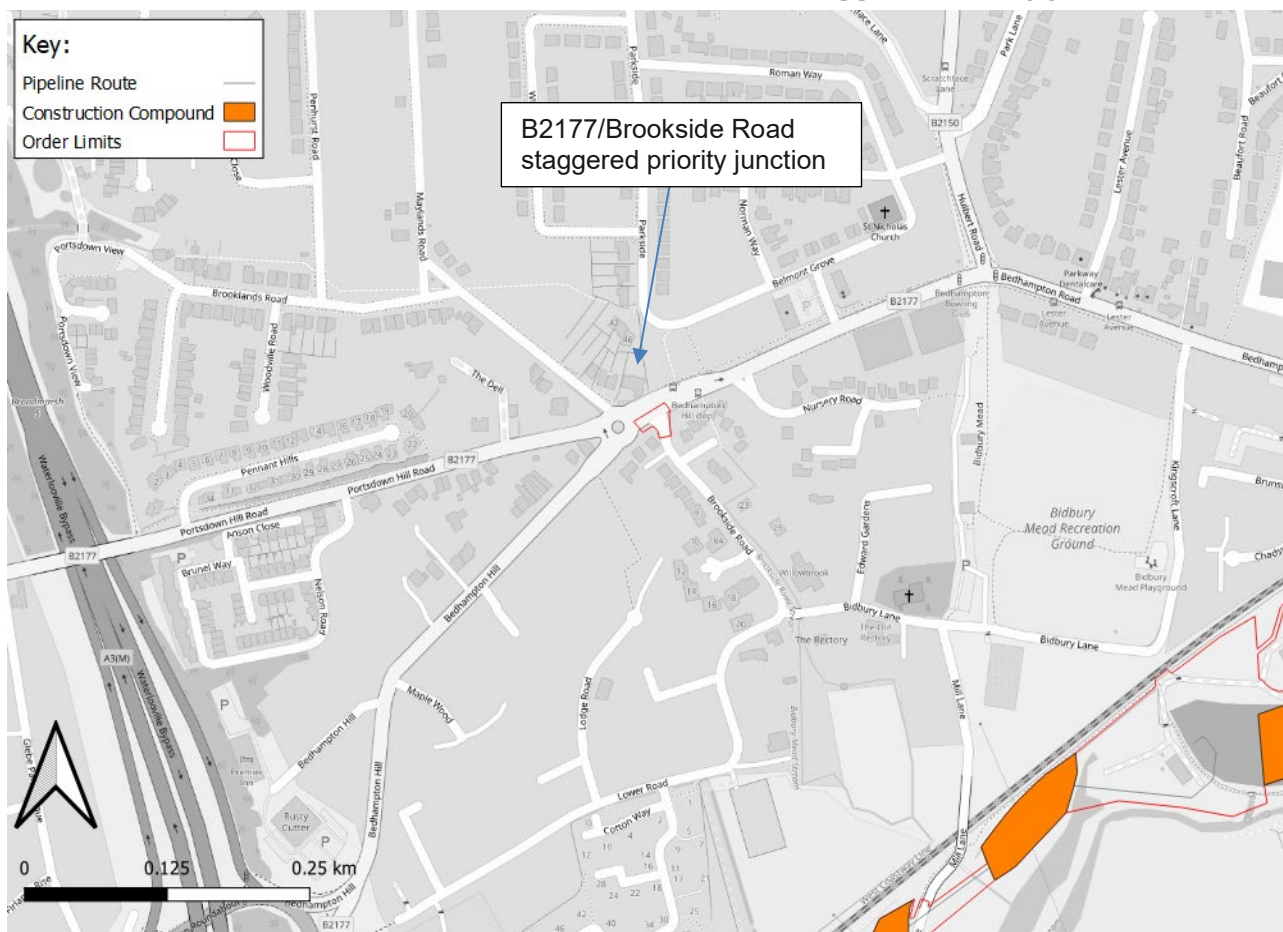
Restriction Type	RAG rating
Works fully restricted during this month (no works permitted)	Red
Partial restrictions during this month	Orange
No restrictions during this month	Green

3 Pipelines between the Water Recycling Plant and Bedhampton Springs

3.1 B2177 Bedhampton Road/Brookside Road staggered priority junction

3.1.1 Off-site works will potentially be required to the B2177 Bedhampton Road/Brookside Road staggered priority junction to facilitate HGV access to temporary construction compound B1-1, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7). The location of these potential works is shown at Graphic 3-1.

Graphic 3-1 B2177 Bedhampton Road/Brookside Road staggered priority junction



3.1.2 Should these works be required, they would comprise of minor works to the kerbed island on the Brookside Road entry to the junction. The island works would be temporary, and the junction would be subsequently reinstated to its existing condition. The necessary traffic management (TM) required at the B2177 Bedhampton Road/Brookside Road staggered priority junction will be confirmed within the detailed TMS.

3.1.3 To facilitate these works a temporary single lane closure would be required on the B2177 Bedhampton Road, leaving a single lane operational westbound. A

temporary lane or road closure would also be required on Brookside Road. A second temporary lane closure on the B2177 Bedhampton Road and a second temporary lane or road closure on Brookside Road would also subsequently be required to reinstate the junction to its existing condition once the temporary construction works associated with B1-1 are complete.

- 3.1.4 Due to the sensitivity of the B2177 Bedhampton Road, which accommodates significant traffic volumes, it is proposed that the lane closure of the B2177 Bedhampton Road arm would be restricted to night-time working hours to minimise any potential disruption associated with the works. The lane or road closure on Brookside Road would not be subject to these night-time working restrictions given that this road is primarily residential in nature and subject to relatively low traffic volumes.
- 3.1.5 Access to properties in the immediate vicinity of these works will be maintained throughout these temporary road and lane closures through a Traffic Marshall's supervision. Access to properties on Brookside Road south of the works will be maintained via Bidbury Lane.
- 3.1.6 The night-time lane and road closures are expected to be in place for up to 14 days with an allowance for up to 28 days.
- 3.1.7 A summary of the proposed traffic management measures at the B2177 Bedhampton Road/Brookside Road staggered priority junction is provided at Table 3-1.

Table 3-1 B2177 Bedhampton Road/Brookside Road Staggered Priority Junction Traffic Management Requirements

Location		Proposed TM	Length of TM (m)	Duration							
B2177 Bedhampton Road/Brookside Road staggered priority junction		Night-time lane closure (B2177 Bedhampton Road) Lane or road closure (Brookside Road)	30m (B2177 Bedhampton Road) 30m (Brookside Road)	Two closures: Island works – up to 14 days with an allowance for up to 28 days Reinstatement - up to 14 days with an allowance for up to 28 days							
Sustainable Mode Provision:		Adequate space and formal segregation to be provided where practicable for pedestrians and cyclists to pass the construction works Night-time works to largely avoid coinciding with the operation of the Brookside Road bus stop, though the bus stop may need to be temporarily suspended.									
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		2-week restriction at Christmas/New Year No other restrictions given that works would take place at night									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					

Location	Proposed TM	Length of TM (m)	Duration
N/A		50 weeks	

3.2 Mill Lane (Havant)

- 3.2.1 A temporary construction compound will be located to the west of Mill Lane, to facilitate tunnelling associated with the Pipelines. It is proposed that access to this compound would be taken from Mill Lane which provides access to a single dwelling as well as the Havant 30 PRow. It is understood to be a popular route for pedestrians and may be promoted as a route for cycles by HCC in the future.
- 3.2.2 To construct the access to this temporary construction compound, a temporary road closure will be required for the period of the construction works. A temporary road closure will also be required to remove the temporary construction compound access once it is no longer required. Access to properties will be maintained throughout these temporary road closures through a Traffic Marshall's supervision. Outside of working hours, the road could be reopened to facilitate access to properties.
- 3.2.3 Each road closure (minor temporary access creation and removal) is expected to be in place for up to seven days and is not expected to be in place for any longer than 21 days.
- 3.2.4 A summary of the proposed traffic management measures on Mill Lane is provided at Table 3-2.

Table 3-2 Mill Lane (Havant) Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Mill Lane	Road Closure	30	Two closures Creation - up to seven days with an allowance for up to 21 days Removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	Construction operatives to be made aware of active travel users. Potential closures of the PRow Havant 30 to be detailed in the RoWMP and co-ordinated with these works. Segregated route to be provided adjacent to works if practicable. Additional measures as identified in the Framework CTMP (Document reference 7.2, DCO Volume 7)).										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		2-week restriction at Christmas/New Year									
Programme Restrictions:											

Location	Proposed TM	Length of TM (m)	Duration
Other Nearby TM:		Total Availability per Calendar Year:	
N/A		50 weeks	

3.3 Harts Farm Way

- 3.3.1 The WRP site is to be located to the north of Harts Farm Way. The WRP site will have a permanent access from Harts Farm Way. This access would include a crossing on Harts Farm Way and a shared footway/cycleway from the crossing into the WRP site.
- 3.3.2 To construct the permanent access, a temporary lane closure with go/no-go signs would be required. A temporary footway diversion would be required whilst the crossing is being constructed.
- 3.3.3 It is anticipated that the construction of the WRP site’s permanent access will take up to 14 days and is not expected to take any longer than 28 days.
- 3.3.4 Given that Harts Farm Way is a traffic sensitive route, it is proposed that any works will be carried out overnight, where practicable. Should night-time working not be practicable, temporary lane closures on Harts Farm Way would only be permitted in the off-peak periods. The TM approach at Harts Farm Way will be agreed post-consent.
- 3.3.5 In addition to the length of the affected section of the road (30m), Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) advises that two advance signs (7001 and 517/518) are placed in advance of the works in each direction. Therefore, the length of the affected section of Harts Farm Way would likely total approximately 60m.
- 3.3.6 A summary of the proposed traffic management measures on Harts Farm Way is provided at Table 3-3.

Table 3-3 Harts Farm Way Traffic Management Requirements

Location		Proposed TM	Length of TM (m)	Duration								
Harts Farm Way		Lane Closure with go/no-go signs (off-peak or night-time)	60	Up to 14 days with an allowance of up to 28 days								
Sustainable Mode Provision:		No existing footway/cycleway provision to north of Harts Farm Way. The footway/cycleway on the south side of Harts Farm Way may be impacted whilst the crossing is being constructed, but a footway closure is to be avoided if practicable.										
Calendar Restrictions:												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Details of Restrictions:		2-week restriction at Christmas/New Year No other restrictions given that works will take place at night-time off-peak										
Programme Restrictions:												
Other Nearby TM:						Total Availability per Calendar Year:						
N/A						50 weeks						

4 Section D: The Water Recycling Plant site to Portsdown Hill

4.1 Gillman Road

- 4.1.1 A temporary construction compound will be located to the west of Gillman Road. This temporary construction compound will be an intermediate shaft compound used to facilitate the construction of the Pipeline. It is proposed that access to this temporary construction compound would be taken from Gillman Road, which is a designated National Cycle Network (NCN) route.
- 4.1.2 To construct the access to this temporary construction compound, a temporary road closure would be required. A temporary road closure will also be required to remove the temporary construction compound access once it is no longer required.
- 4.1.3 Each road closure (minor temporary access creation and removal) is expected to be in place for up to seven days and is not expected to be in place for any longer than 21 days.
- 4.1.4 The temporary construction compound access will be located to the north of the existing barrier which currently prohibits vehicular movements on Gillman Road. As such it is not anticipated that any traffic will be affected by this planned closure, however this route is open for pedestrians and cycles. Therefore, traffic management has been considered at this location for any potential pedestrians and cycles using Gillman Road.
- 4.1.5 Subject to relevant project programmes, there may also be a potential opportunity to co-ordinate works with the emerging proposals for traffic signals at the Gillman Road junction with Portsdown Hill Road and Crookhorn Lane as part of the Campdown development, subject to when these works come forward.
- 4.1.6 A summary of the proposed traffic management measures on Gillman Road is provided at Table 4-1.

Table 4-1 Gillman Road Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Gillman Road	Road Closure	30	Two closures Temporary access creation - up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway provision Construction of the temporary access: Adequate space and formal segregation to be provided where practicable for pedestrians and cyclists to pass the construction works Operation of temporary access: Traffic Marshall to manage pedestrian and cycle movements in the vicinity of the access, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7).										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:			2-week restriction at Christmas/New Year								
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						50 weeks					

5 Section E: Portsdown Hill to Boarhunt

5.1 New Down Lane (Private Road)

- 5.1.1 A series of closures will be required on New Down Lane (private road). New Down Lane provides access to Widley Farm as well as the PRow Southwick and Widley 28 but is otherwise a dead-end road.
- 5.1.2 A IPS and a BPT will be located adjacent to New Down Lane. The IPS will re-pressurise the Pipeline to accommodate changes in the topography of the land in the vicinity of the Pipeline. The BPT is required at high points along the Pipeline route to reduce the amount of energy required to transfer water. A permanent access will be installed on New Down Lane to provide access to the IPS and BPT. This permanent access will be in the form of one consolidated access point that provides access to both the IPS and the BPT from the public highway.
- 5.1.3 In addition to this permanent access, the Pipeline will cross New Down Lane between agricultural fields to the east and west.
- 5.1.4 Furthermore, there will also be two temporary construction compound accesses located on either side of New Down Lane at the same location as the pipeline crossing.
- 5.1.5 The elements outlined will require four temporary full road closures. The precise length of these road closures will be confirmed within the detailed TMS document, but it is estimated that the New Down Lane will be closed from the junction with Portsdown Hill Road.
- 5.1.6 These road closures will vary in duration. The temporary road closure associated with the permanent AGP access is expected to be for up to 14 days and is not expected to be for any longer than 28 days. The road closure associated with the Pipeline crossing is expected to be in place for seven days and is not expected to last any longer than 21 days. The road closure associated with the creation of the temporary construction compound accesses is expected to be in place for up to seven days and is not expected to be in place for longer than 21 days, whilst the closure associated with the removal of these accesses is expected to also be for up to seven days and will also not be in place for any longer than 21 days. It is possible that some of these construction works may take place concurrently, and therefore the total length of time that New Down Lane is closed for will be reduced. This will be confirmed post-consent.
- 5.1.7 It will be ensured that the closure of New Down Lane will be scheduled to avoid coinciding with the closure of Widley Walk given that Widley Farm (north of New Down Lane which is otherwise a no through route road) can also be accessed via this link.
- 5.1.8 A summary of the proposed traffic management measures on New Down Lane is provided at Table 5-1.

Table 5-1 New Down Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
New Down Lane	Road Closure	120	Four closures Permanent access creation – 14 days with an allowance for up to 28 days Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	PRow diversion will be implemented (details in RoWMP) No existing cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Widley Walk 21 days (63 days worst case scenario)						47 weeks (41 weeks worst case scenario)					

5.2 Widley Walk

- 5.2.1 The Pipeline will cross Widley Walk between agricultural fields to the east and west, requiring a full road closure for the period of the construction works.
- 5.2.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and will not last more than 21 days.
- 5.2.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 5.2.4 It will be ensured that the closure of Widley Walk will be scheduled to avoid coinciding with the closure of at least one of Mill Lane and Pigeon House Lane given that both roads provide suitable and proximate north/south links between Purbrook Heath Road and Portsdown Hill Road. Of the three routes, at least one route will be kept open and offered as a designated diversion route at any one time. Furthermore, the closure of Widley Walk will be scheduled to avoid coinciding with the closure of New Down Lane as this offers pedestrians an alternative proximate north/south route to Widley Walk.

5.2.5 A summary of the proposed traffic management measures on Widley Walk is provided at Table 5-2.

Table 5-2 Widley Walk Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Widley Walk	Road Closure	20	Three closures: Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Mill Lane/Pigeon House Lane (up to 21 days with an allowance for up to 63 days) New Down Lane (up to 35 days with an allowance for up to 105 days)						42 weeks (31 weeks worst case scenario)					

5.3 Mill Lane (Portsdown)

- 5.3.1 The Pipeline will cross Mill Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works.
- 5.3.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to take more than 21 days.
- 5.3.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 5.3.4 It will be ensured that the closure of Mill Lane will be scheduled to avoid coinciding with the closure of Widley Walk and Pigeon House Lane given that both roads provide suitable and proximate north/south links between Purbrook Heath Road

and Portsdown Hill Road. Of the three routes, at least one route will be kept open and offered as a designated diversion route at any one time.

5.3.5 A summary of the proposed traffic management measures on Mill Lane is provided at Table 5-3.

Table 5-3 Mill Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Mill Lane (Portsdown)	Road Closure	20	Three closures: Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Widley Walk/Pigeon House Lane (up to 21 days with an allowance for up to 63 days)						47 weeks (41 weeks worst case scenario)					

5.4 Pigeon House Lane

5.4.1 The Pipeline will cross Pigeon House Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works. A section of the Pilgrims Trail follows Pigeon House Lane in the vicinity of the affected section and would need diverting temporarily, as set out in the Framework RoWMP (Document reference 7.2, DCO Volume 7).

5.4.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to take more than 21 days.

5.4.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.

- 5.4.4 It will be ensured that the closure of Pigeon House Lane will be scheduled to avoid coinciding with the closure of Widley Walk and Mill Lane given that both roads provide suitable and proximate north/south links between Purbrook Heath Road and Portsdown Hill Road. Of the three routes, at least one route will be kept open and offered as a designated diversion route at any one time.
- 5.4.5 A summary of the proposed traffic management measures on Pigeon House Lane is provided at Table 5-4.

Table 5-4 Pigeon House Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Pigeon House Lane	Road Closure	20	Three closures: Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision however Pigeon House Lane forms part of the Pilgrims Trail. As detailed in the Framework RoWMP there will be appropriate signage for uses of the Pilgrims Trail. Works to avoid any events that are likely to utilise the Pilgrims Trail route.										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Widley Walk/Mill Lane (up to 21 days with an allowance for up to 63 days)						47 weeks (41 weeks worst case scenario)					

5.5 B2177 Southwick Road

- 5.5.1 The Pipeline will cross the B2177 Southwick Road between agricultural fields to the east and west.
- 5.5.2 There will also be a temporary construction compound located on the B2177 Southwick Road at the same location as the Pipeline crossing.

- 5.5.3 There is also likely to be a haul road access required on the B2177 Southwick Road opposite the proposed temporary construction compound. This will be confirmed within the detailed TMS document to be prepared post-consent.
- 5.5.4 Assuming that a haul road access will be required, in total these elements on the B2177 Southwick Road will require five separate temporary lane closures with shuttle-working signals for the period of the construction works.
- 5.5.5 Given that this road is traffic-sensitive, works associated with the creation and removal of temporary accesses will be carried out during the night-time to minimise disruption. Works associated with the Pipeline crossing of the B2177 Southwick Road will take place during day and night as night-time restrictions would not be feasible. This is because it is not possible to re-open the road during day-time whilst the crossing works are ongoing.
- 5.5.6 These lane closures will vary in duration. The lane closure associated with the Pipeline crossing is expected to take seven days and is not expected to take any longer than 21 days. The lane closure associated with the creation of the minor temporary construction compound access is expected to be for up to seven days and is not expected to take longer than 21 days, whilst the closure associated with the removal of the access will also be for up to seven days and is also not expected to be in place for longer than 21 days. The duration of the closures associated with the proposed temporary haul road access construction and removal would be the same as this. It is possible that some of these construction works may take place concurrently, and therefore the total length of time that lane closures are in place on the B2177 Southwick Road will be reduced. This will be confirmed post-consent.
- 5.5.7 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual [4] advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction. Therefore, the length of the affected section of the B2177 Southwick Road would total 60m.
- 5.5.8 Portchester Lane’s constrained width means that it is an unsuitable route to accommodate diverted traffic from the B2177 Southwick Road. As such, it is not considered necessary for any lane closures associated with the B2177 Southwick Road to avoid coinciding with the road closure of Portchester Lane.
- 5.5.9 In addition to Portchester Lane, there are multiple unsuitable alternative routes in the vicinity of the B2177 Southwick Road that road users may attempt to use to circumvent the proposed traffic management on the B2177 Southwick Road. This may have negative permutations for these unsuitable alternative routes, including the potential for damage to the highway network to occur as well as the disruption of the existing amenity of these roads and their immediate vicinity. As such, it is necessary to consider how to prevent vehicles using these unsuitable alternatives. Potential options to mitigate against the use of these unsuitable alternative routes include:
1. Implementation of a robust signage strategy
 2. Closure of unsuitable alternative routes to prevent rat-running

- 5.5.10 The preferred option to mitigate against rat-running will be discussed and agreed with the LHA post-consent. This only relates to the daytime lane closures associated with the Pipeline crossing.
- 5.5.11 A summary of the proposed traffic management measures on the B2177 Southwick Road is provided at Table 5-5.

Table 5-5 B2177 Southwick Road Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
B2177 Southwick Road	Night-time lane closure with shuttle-working signals for access creation and removal. Day and night-time lane closure with shuttle-working signals for Pipeline crossing.	60	Five closures Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway provision Construction of the temporary accesses: Cycles to join general traffic, with appropriate lane width and accompanying signage to provide awareness that cycles should not be passed by vehicles. Operation of temporary accesses: Traffic Marshall to manage cycle movements in the vicinity of the access, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7).										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:			Two week restriction at Christmas/New Year								
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
None						50 weeks					

5.6 Crooked Walk Lane

- 5.6.1 The Pipeline will cross Crooked Walk Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works.
- 5.6.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 5.6.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 5.6.4 The closure of Crooked Walk Lane will be scheduled to avoid coinciding with the road closure on Portchester Lane given that both roads provide suitable and proximate north/south links between Portsdown Hill Road and the B2177 Southwick Road. Portchester Lane will therefore be a designated diversion route for those travelling on Crooked Walk Lane.
- 5.6.5 A summary of the proposed traffic management measures on Crooked Walk Lane is provided at Table 5-6.

Table 5-6 Crooked Walk Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Crooked Walk Lane	Road Closure	20	Three closures: Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Portchester Lane (up to 21 days with an allowance for up to 63 days)						47 weeks (41 weeks worst case scenario)					

5.7 Portchester Lane

- 5.7.1 The Pipeline will cross Portchester Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works.
- 5.7.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 5.7.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 5.7.4 The closure of Portchester Lane will be scheduled to avoid coinciding with the road closure on Crooked Walk Lane given that both roads provide suitable and proximate north/south links between Portsdown Hill Road and the B2177 Southwick Road. Crooked Walk Lane will therefore be a designated diversion route for those travelling on Portchester Lane.
- 5.7.5 A summary of the proposed traffic management measures on Portchester Lane is provided at Table 5-7.

Table 5-7 Portchester Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Portchester Lane	Road Closure	20	Three closures Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Crooked Walk Lane (up to 21 days with an allowance for up to 63 days)						47 weeks (41 weeks worst case scenario)					

5.8 Monument Lane

- 5.8.1 The Pipeline will cross Monument Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works.
- 5.8.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 5.8.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 5.8.4 The closure of Monument Lane associated with this traffic management will be scheduled to avoid coinciding with the road closure of Boarhunt Road given that this road provides a suitable and proximate north/south link between Portsdown Hill Road and the B2177 Southwick Road. Boarhunt Road will therefore be a designated diversion route for those travelling on Monument Lane.
- 5.8.5 A summary of the proposed traffic management measures on Monument Lane is provided at Table 5-8.

Table 5-8 Monument Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Monument Lane	Road Closure	20	Three closures Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		One week restriction for Dubs South Campout Festival Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Boarhunt Road (up to 35 days with an allowance for up to 105 days)						45 weeks (35 weeks worst case scenario)					

5.9 Boarhunt Road

- 5.9.1 The Pipeline will cross Boarhunt Road between agricultural fields to the east and west. Boarhunt Road provides access to the PRow Boarhunt 19 in the vicinity of the works.
- 5.9.2 A temporary haul road access will also be required on both sides of Boarhunt Road.
- 5.9.3 A temporary construction compound will also be located on Boarhunt Road. This temporary construction compound will require a lane closure for this period of the construction works.
- 5.9.4 These road closures will vary in duration. The road closure associated with the Pipeline crossing is expected to take up to seven days and is not anticipated to last longer than 21 days. The lane closures associated with the creation and removal of the temporary haul road access is expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road access respectively. The lane closure associated with the creation of the temporary construction compound accesses is expected to take up to seven days and will not take longer than 21 days, whilst the lane closure associated with the removal of these accesses is also expected to take up to seven days and will not take longer than 21 days. It is possible that some of these construction works may take place concurrently, and therefore the total length of time that there are lane/road closures on Boarhunt Road could be reduced. This will be confirmed within the detailed TMS.
- 5.9.5 Monument Lane's constrained width means that it is an unsuitable route to accommodate diverted traffic from Boarhunt Road. As such, it is not considered necessary for any road/lane closures associated with Boarhunt Road to avoid coinciding with the road closure of Monument Lane.
- 5.9.6 In addition to Monument Lane, there are multiple unsuitable alternative routes in the vicinity of Boarhunt Road that road users may attempt to use to circumvent the proposed traffic management on Boarhunt Road. This may have negative permutations for these unsuitable alternative routes, including the potential for damage to the highway network to occur as well as the disruption of the existing amenity of these roads and their immediate vicinity. As such, it is necessary to consider how to prevent vehicles using these unsuitable alternatives. Potential options to mitigate against the use of these unsuitable alternative routes include:
1. Implementation of a robust signage strategy
 2. Closure of unsuitable alternative routes to prevent rat-running
 3. Applicant accepting liability for any damage to verges on unsuitable alternative routes caused by vehicle overrun
- 5.9.7 The preferred option to mitigate against rat-running will be discussed and agreed with the LHA post-consent.
- 5.9.8 A summary of the proposed traffic management measures on Boarhunt Road is provided at Table 5-9.

Table 5-9 Boarhunt Road Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Boarhunt Road	Road closure	30	Single closure Pipeline crossing – up to seven days with an allowance for up to 21 days								
	Lane closure with signal-controlled junction traffic management	30	Up to Four closures Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	PRoW diversion to be implemented (detail in Framework RoWMP (Document reference 7.2, DCO Volume 7)) No existing cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						50 weeks					

6 Section F: Boarhunt to Crockerhill

6.1 Whitedell Lane

- 6.1.1 The Pipeline will cross Whitedell Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works.
- 6.1.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 6.1.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 6.1.4 Access to Whitedell Farm to the north of Whitedell Lane will be maintained during the construction works. This will be done by establishing a temporary track to one side of the affected section prior to the road crossing. Once the Pipeline has been installed, the road will be reopened and the temporary track removed. Whitedell Farm is the sole facility served by Whitedell Lane to the north and is otherwise a no-through road route to the north of the road closure. Therefore, this temporary measure is considered suitable. A summary of the proposed traffic management measures on Whitedell Lane is provided at Table 6-1.

Table 6-1 Whitedell Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Whitedell Lane	Road Closure	20	Three closures: Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						50 weeks					

6.2 Chalk Lane

- 6.2.1 A temporary construction compound will be located to the east of Chalk Lane. This temporary construction compound will be a sectional site compound used to facilitate the construction of the Pipeline. It is possible that access to this temporary construction compound would be taken from Chalk Lane to the north of the A32/Knowle Road/Chalk Lane roundabout junction.
- 6.2.2 To construct the potential access to this temporary construction compound, a temporary lane closure with 'GIVE/TAKE' working will be required for the period of the construction works. A temporary lane closure will also be required to remove the temporary construction compound access once it is no longer required.
- 6.2.3 Each lane closure (temporary access creation and removal) is expected to be in place for up to seven days and is not expected to be in place for any longer than 21 days.
- 6.2.4 The 'GIVE/TAKE' system will follow the principles for advance signing, lead-in taper, works zone and exit taper as set out within Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009). Once accounting for lead-in and exit taper, the length of these works will be approximately 50m in length.
- 6.2.5 A summary of the proposed traffic management measures on Chalk Lane is provided at Table 6-2.

Table 6-2 Chalk Lane Traffic Management Requirements

Location		Proposed TM	Length of TM (m)	Duration							
Chalk Lane		Lane Closure with 'GIVE/TAKE' system	50	Two closures Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days							
Sustainable Mode Provision:		No existing footway/cycleway provision									
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						50 weeks					

6.3 Forest Lane

- 6.3.1 The Pipeline will cross Forest Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works.
- 6.3.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 6.3.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 6.3.4 The closure of Forest Lane will be scheduled to avoid coinciding with the road closure of Castle Farm Lane given that this road provides an alternative means of access to the north-eastern extent of Castle Farm Lane.
- 6.3.5 A summary of the proposed traffic management measures on Forest Lane is provided at Table 6-3.

Table 6-3 Forest Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Forest Lane	Road Closure	20	Three closures: Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Castle Farm Lane private road (up to seven days with an allowance for up to 21 days)						49 weeks (47 weeks worst case scenario)					

7 Section G: Crockerhill to Wickham

7.1 Castle Farm Lane (Private Road)

- 7.1.1 The Pipeline will cross Castle Farm Lane (private road) between agricultural fields to the north and south, requiring a full road closure for the period of the construction works. PRow Wickham 10 also runs along the extent of Castle Farm Lane.
- 7.1.2 The private road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 7.1.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the private road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 7.1.4 The closure of Castle Farm Lane will be scheduled to avoid coinciding with the road closure of Forest Lane given that this road provides an alternative means of access to the eastern extent of Castle Farm Lane.
- 7.1.5 A summary of the proposed traffic management measures on Castle Farm Lane is provided at Table 7-1.

Table 7-1 Castle Farm Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Castle Farm Lane	Road Closure	20	Three closures: Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	Short-term PRow closure to be communicated in advance (detail in Framework RoWMP (Document reference 7.2, DCO Volume 7)) No existing cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:			Two week restriction at Christmas/New Year								
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Forest Lane (up to seven days with an allowance for up to 21 days)						49 weeks (47 worst case scenario)					

7.2 A32 Hoads Hill

- 7.2.1 A temporary construction compound will be located on each side of the A32 Hoads Hill. These temporary construction compounds will comprise of both a sectional compound and a combined sectional/trenchless compound which will be used to facilitate the construction of the Pipeline. It is proposed that access to these temporary construction compounds would be taken from the A32 Hoads Hill.
- 7.2.2 To construct and remove the accesses to these temporary construction compounds, a temporary lane closure will be required on either side of the carriageway. A temporary lane closure will also be required on each side of the carriageway to remove the temporary construction compound accesses once they are no longer required.
- 7.2.3 It is anticipated that each lane closure will take place for up to seven days with a worst case scenario allowance of up to 21 days. In total there will be 4 lane closures on the A32 Hoads Hill (construction of two temporary accesses and removal of two temporary accesses).
- 7.2.4 Given that this road is traffic-sensitive, works will be carried out during the night-time, where practicable, to minimise disruption.
- 7.2.5 Three lanes of traffic are accommodated by the A32 Hoads Hill at this location, including two southbound lanes. As such, there is an opportunity to maintain two-way movements without a need for temporary traffic signals. Therefore, though the A32 Hoads Hill is not a dual carriageway, it is proposed that lane closures would be enacted in line with guidance for dual carriageway roads as set out within Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009). This involves contra-flow operation across two bi-directional lanes subject to prior agreement from HCC as the LHA. An agreed, final approach to traffic management at this location will then be presented by the Contractor within the detailed TMS document.
- 7.2.6 The lane closures on the A32 Hoads Hill will be scheduled to avoid coinciding with the lane closure on Titchfield Lane given that this road provides an alternative north/south link to the west of the A32 Hoads Hill. Whilst Titchfield Lane will not be advised as a diversion route for traffic travelling on the A32 Hoads Hill given that lane closures will continue to allow traffic to pass on A32 Hoads Hill, it is anticipated that some drivers may choose to divert along Titchfield Lane as a result of the lane closures on the A32 Hoads Hill.
- 7.2.7 Furthermore, where practicable temporary access works will be carried out during night-time hours so as to minimise the disruption associated with lane closures.
- 7.2.8 In addition to night-time working, where practicable, opportunities will be explored to co-ordinate traffic management with the planned works on the A32 associated with the Welborne Garden Village consented development. This will be confirmed in the detailed TMS.
- 7.2.9 It is understood that NH's proposed M27 Junction 10 improvements could be complete prior to the commencement of construction associated with the Project. However, in the event that the Junction 10 works are delayed, the proposed traffic management on the A32 will be co-ordinated where practicable to minimise the potential for cumulative impacts. This will be confirmed in the detailed TMS.

- 7.2.10 The signage strategy (outlined in section 2.8) for traffic management at the A32 could encompass SRN junctions, subject to agreement with NH, given that this route is well-used by those travelling on the SRN.
- 7.2.11 A summary of the proposed traffic management measures on the A32 Hoads Hill is provided at Table 7-2.

Table 7-2 A32 Hoads Hill Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
A32 Hoads Hill	Lane Closure (night-time where practicable)	30	Four closures: Two temporary access creation – up to seven days with an allowance of up to 21 days Two temporary access removal – up to seven days with an allowance of up to 21 days								
Sustainable Mode Provision:	Construction of the temporary access: Adequate space and formal segregation to be provided where practicable for pedestrians and cyclists to pass the construction works Operation of temporary access: Traffic Marshall to manage pedestrian and cycle movements in the vicinity of the access, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7).										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		One week restriction for the Wickham Festival Three-day restriction for the Wickham Horse Fair Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Titchfield Lane (up to 14 days with an allowance of up to 28 days)						46 weeks (44 weeks worst case scenario)					

7.3 Tanfield Lane

- 7.3.1 The Pipeline will cross Tanfield Lane between Wickham Park Golf Club and Wickham Water Treatment Works to the north and south respectively, requiring a full road closure for the period of the construction works. PRow Wickham 5 also runs along Tanfield Lane in the vicinity of the affected section.
- 7.3.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to take more than 21 days.

- 7.3.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 7.3.4 A summary of the proposed traffic management measures on Tanfield Lane is provided at Table 7-3.

Table 7-3 Tanfield Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Tanfield Lane	Road Closure	20	Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	Short-term PRow closure with diversion via Meon Valley Trail (detail in Framework RoWMP (Document reference 7.2, DCO Volume 7)) No existing cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						50 weeks					

7.4 Titchfield Lane

- 7.4.1 A temporary access is proposed from Titchfield Lane. The PRow Wickham 1 connects from Titchfield Lane in the immediate vicinity of the temporary access.
- 7.4.2 The temporary access will require a temporary lane closure for the period of the construction works. It is anticipated that the construction of the temporary access will take up to 14 days and is not expected to take more than 28 days.
- 7.4.3 Given that the location of the is within the vicinity of the signalised Titchfield Lane/Blind Lane/A334 Winchester Road junction, traffic management should follow guidance for signal-controlled junctions as set out within Chapter Eight of

the Traffic Signs Manual (Department for Transport, 2009). Based on this guidance, there are some options for traffic management in this location, including:

1. Adjustment of signal timings to minimise queueing on Titchfield Lane
2. Deactivation of permanent signals and implementation of portable temporary signals
3. Multiphase control of the junction and shuttle lane

7.4.4 The preferred traffic management option will be agreed with the LHA post-consent.

7.4.5 It will be ensured that the lane closures on Titchfield Lane will be scheduled to avoid coinciding with the lane closure on the A32 Hoads Hill given that Titchfield Lane provides an alternative north/south link to the east of the A32 Hoads Hill. Whilst Titchfield Lane will not be advised as a diversion route for traffic travelling on the A32 Hoads Hill given that lane closures will continue to allow traffic to pass on A32 Hoads Hill, it is anticipated that some drivers may choose to divert along Titchfield Lane as a result of the lane closures on the A32 Hoads Hill.

7.4.6 A summary of the proposed traffic management measures on Titchfield Lane is provided at Table 7-4.

Table 7-4 Titchfield Lane Traffic Management Requirements

Location		Proposed TM		Length of TM (m)		Duration					
Titchfield Lane		Lane closure with signal controlled junction traffic management		30		14 days with an allowance of up to 28 days					
Sustainable Mode Provision:		PRoW diversion will be implemented (detail in Framework RoWMP (Document reference 7.2, DCO Volume 7)). No existing cycleway provision									
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		One week restriction for the Wickham Festival Three-day restriction for the Wickham Horse Fair Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:				Total Availability per Calendar Year:							
A32 Hoads Hill (up to 28 days with an allowance of up to 84 days)				47 weeks (43 weeks worst case scenario)							

7.5 Trenchless construction works

7.5.1 A series of trenchless construction works will be installed to facilitate the construction of the pipeline along Section G of the Pipeline. These include crossings of:

1. A32 Hoads Hill
2. A334 Winchester Road

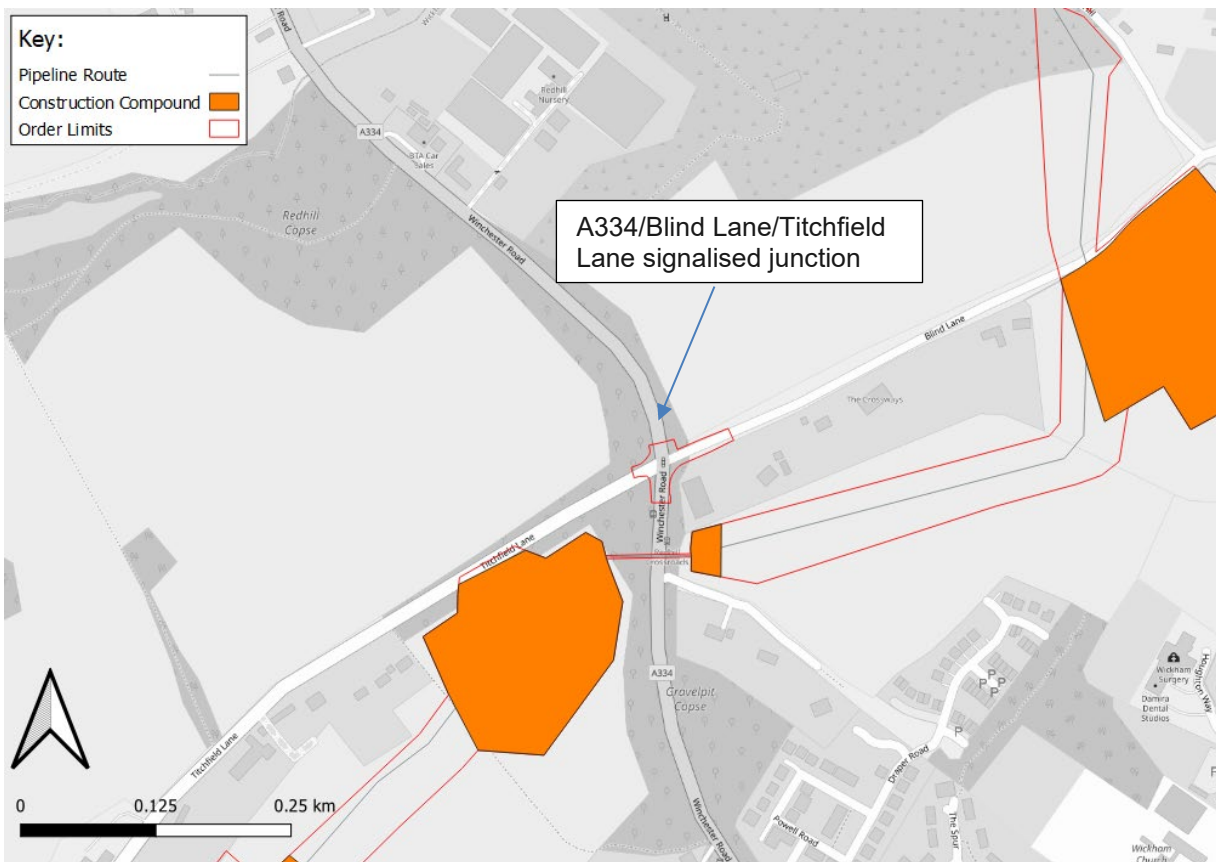
7.5.2 These trenchless construction works will minimise disruption associated with the Pipeline at these locations given that traffic management measures will not be required.

8 Section H: Wickham to Shedfield

8.1 A334 Winchester Road/Blind Lane/Titchfield Lane signalised junction

- 8.1.1 To facilitate HGV access to temporary construction compounds H-1, H-2 and H-3, the Framework CTMP (Document reference 7.2, DCO Volume 7) identifies off-site works at the A334 Winchester Road/Blind Lane/Titchfield Lane signalised junction. The location of these works is shown at Graphic 8-1.

Graphic 8-1 A334 Winchester Road/Blind Lane/Titchfield Lane signalised junction



- 8.1.2 The Framework CTMP (Document reference 7.2, DCO Volume 7) presents two options to enable HGV access to temporary construction compounds H-1, H-2 and H-3, including either minor widening works to the Blind Lane arm of the junction, or a set back to the stop-line on the Blind Lane arm. The TM approach at the A334 Winchester Road/Blind Lane/Titchfield Lane signalised junction is dependent upon whichever one of these options comes forward and will be agreed with the LHA post-consent.
- 8.1.3 As detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7), these works could be temporary or permanent. The stop line set back works could be temporary, in which case they would require reinstatement to pre-existing conditions. The widening works on Blind Lane would likely be permanent and therefore not require any reinstatement.

- 8.1.4 To set back the stop line, a temporary road closure on Blind Lane would be required for construction and reinstatement. For the widening, a temporary lane closure would also be required on the A334 Winchester Road.
- 8.1.5 Due to the sensitivity of this junction, which accommodates significant traffic volumes, it is proposed that traffic management on the A334 would be restricted to night-time working hours where practicable to minimise any potential disruption. Night-time working would not be required on Blind Lane given that this route accommodates relatively low volumes of traffic.
- 8.1.6 Access to properties will be maintained throughout these temporary road and lane closures.
- 8.1.7 The potential lane and road closures are expected to be in place for up to 14 days with an allowance for up to 28 days.
- 8.1.8 A summary of the proposed traffic management measures at the A334 Winchester Road/Blind Lane/Titchfield Lane signalised junction is provided at Table 8-1.

Table 8-1 A334 Winchester Road/Blind Lane/Titchfield Lane Signalised Junction Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
A334 Winchester Road/Blind Lane/Titchfield Lane signalised junction	Lane closure (where practicable) on A334 Winchester Road; Road closure on Blind Lane	60m (A334 Winchester Road) 30m (Blind Lane)	Two potential closures: Widening/stop line set back – up to 14 days with an allowance for up to 28 days Reinstatement (if required) – up to 14 days with an allowance for up to 28 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year One week restriction for Wickham Festival Three-day restriction for Wickham Horse Fair									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Pricketts Hill (up to 21 days with an allowance of up to 63 days)						46 weeks (40 weeks worst case scenario)					

8.2 Blind Lane

- 8.2.1 In addition to the works in, which will affect the Blind Lane arm of the A334/Titchfield Lane/Blind Lane junction, the following works will also require traffic management on Blind Lane.
- 8.2.2 The Pipeline will cross Blind Lane between agricultural fields to the north and south.
- 8.2.3 There will also be temporary construction compound accesses located to the north and south of Blind Lane at the same location as the pipeline crossing.
- 8.2.4 These elements will require two temporary full road closures for the period of the construction works.
- 8.2.5 These road closures will vary in duration. The road closure associated with the Pipeline crossing is expected to take up to seven days and are not anticipated to last longer than 21 days. The road closures associated with the creation and removal of the temporary haul road access is expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road access respectively. The road closure associated with the creation of the temporary construction compound accesses is expected to take up to seven days and will not take longer than 21 days, whilst the closure associated with the removal of these accesses is also expected to take up to seven days and will not take longer than 21 days. It is possible that some of these construction works may take place concurrently, and therefore the total length of time that Blind Lane is closed for will be reduced. This will be confirmed within the detailed TMS.
- 8.2.6 It will be ensured that the closure of Blind Lane will be scheduled to avoid coinciding with the road closure of Pricketts Hill given that this road provides a suitable and proximate east/west link between the A334 Winchester Road and the Pricketts Hill/Blind Lane/Frith Lane/Northfield Farm Lane crossroads. Pricketts Hill will therefore be a designated diversion route for those travelling on Blind Lane.
- 8.2.7 A summary of the proposed traffic management measures on Blind Lane is provided at Table 8-2.

Table 8-2 Blind Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Blind Lane	Road Closure	20	Five closures Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		One week restriction for Wickham Festival Three-day restriction for Wickham Horse Fair Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Pricketts Hill (up to 21 days with an allowance of up to 63 days)						46 weeks (40 weeks worst case scenario)					

8.3 Pricketts Hill

- 8.3.1 The Pipeline will cross Pricketts Hill between agricultural fields to the north-east and south-west, requiring a full road closure for the period of the construction works.
- 8.3.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 8.3.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are

expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.

8.3.4 It will be ensured that the closure of Pricketts Hill will be scheduled to avoid coinciding with the road closure of Blind Lane given that this road provides a suitable and proximate east/west link between the Shirrell Heath High St and the Pricketts Hill/Blind Lane/Frith Lane/Northfield Farm Lane crossroads. Blind Lane will therefore be a designated diversion route for those travelling on Pricketts Hill.

8.3.5 A summary of the proposed traffic management measures on Pricketts Hill is provided at Table 8-3.

Table 8-3 Pricketts Hill Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Pricketts Hill	Road Closure	20	Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		One week restriction for Wickham Festival Three-day restriction for Wickham Horse Fair Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Blind Lane (up to 35 days with an allowance of up to 105 days)						44 weeks (34 weeks worst case scenario)					

8.4 Shirrell Heath High Street

8.4.1 A temporary construction compound access will be located to the north-west of Shirrell Heath High Street. This temporary construction compound will be a trenchless compound used to facilitate the construction of the Pipeline’s trenchless crossing of Shirrell Heath High Street and the open-cut section of pipeline to the

west. It is proposed that access to this compound would be taken from Shirrell Heath High Street.

- 8.4.2 To construct the access to this temporary construction compound, a temporary lane closure with shuttle-working signals will be required for the period of the construction works. A second temporary lane closure will also be required to remove the temporary construction compound access once it is no longer required.
- 8.4.3 Each lane closure (temporary access creation and removal) is expected to be in place for up to seven days and is not expected to be in place for any longer than 21 days.
- 8.4.4 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction. Therefore, the length of the affected section of Shirrell Heath High Street would total approximately 60m.
- 8.4.5 A summary of the proposed traffic management measures on Shirrell Heath High Street are set out at Table 8-4.

Table 8-4 Shirrell Heath High Street Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Shirrell Heath High Street	Lane Closure with shuttle working signals	60	Two closures Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	Construction of the temporary access: Adequate space and formal segregation to be provided where practicable for pedestrians and cyclists to pass the construction works Operation of temporary access: Traffic Marshall to manage pedestrian and cycle movements in the vicinity of the access, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7).										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		One week restriction for Wickham Festival Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						49 weeks					

8.5 Trenchless construction works

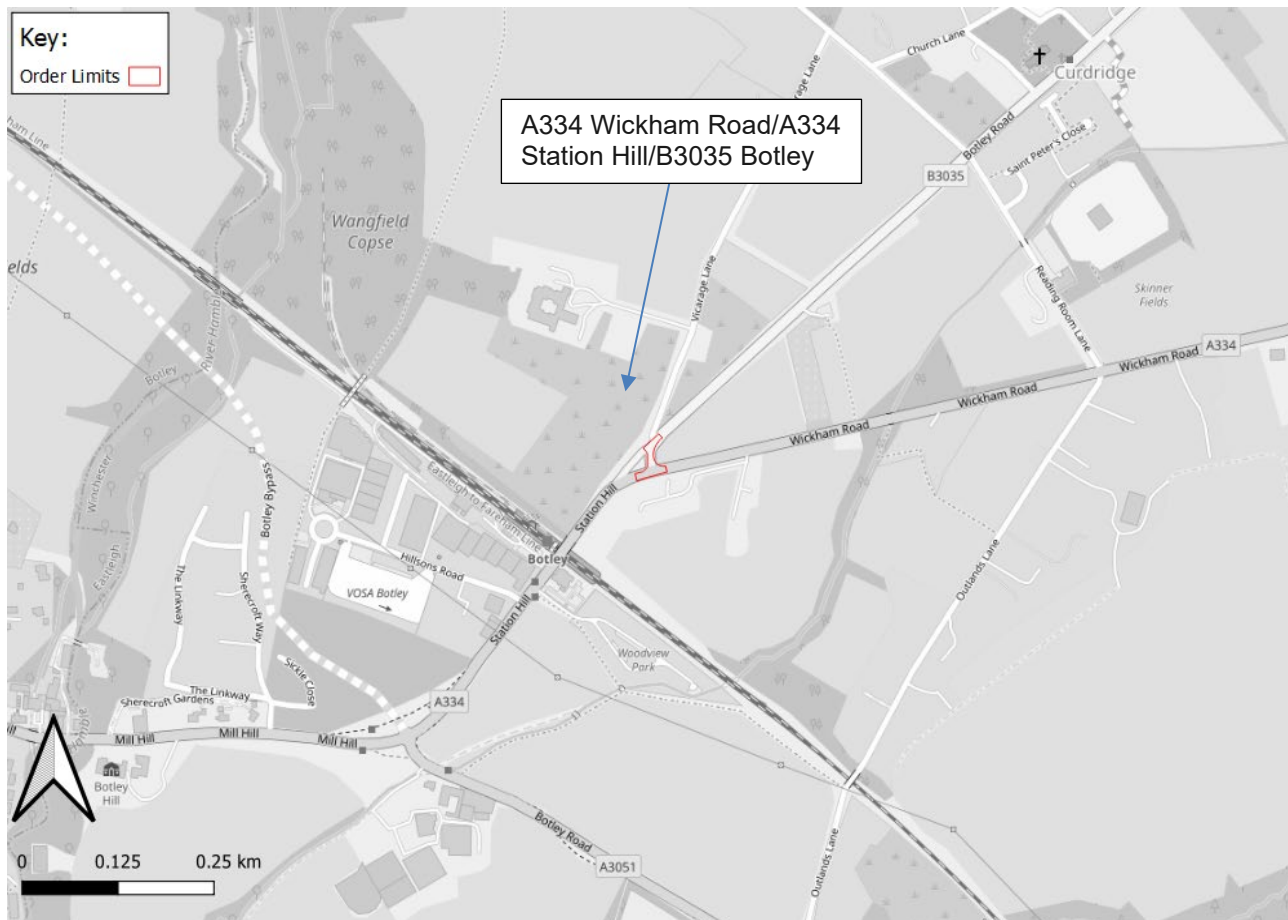
- 8.5.1 There are also two trenchless construction works associated with Section H of the Pipeline. This includes crossings of:
1. Shirrell Heath High Street
 2. B2177 Winchester Road.
- 8.5.2 These trenchless construction works will minimise disruption associated with the Pipeline at these locations given that traffic management measures will not be required.

9 Section J: Shedfield to the River Hamble

9.1 A334 Wickham Road/A334 Station Hill/B3035 Botley Road priority junction

9.1.1 Off-site works will potentially be required to the A334 Wickham Road/A334 Station Hill/B3035 Botley Road priority junction to facilitate HGV access to various temporary construction compounds, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7). The location of these potential works is shown at Graphic 9-1.

Graphic 9-1 A334 Wickham Road/A334 Station Hill/B3035 Botley Road priority junction



9.1.2 Should these works be required, they would comprise of minor widening works to the either the kerbed island or the nearside kerb on the B3035 Botley Road entry to the junction. The widening works would be temporary, and the junction would be subsequently reinstated to its existing condition. The necessary TM required at the A334 Wickham Road/A334 Station Hill/B3035 Botley Road priority junction will be confirmed within the detailed TMS.

9.1.3 To facilitate these works a temporary single lane closure would be required on the B3035 Botley Road, leaving a single lane operational northbound. A second temporary lane closure on the B3035 Botley Road would also subsequently be

required to reinstate the junction to its existing condition once the temporary construction works associated with various temporary construction compounds accessed via the B3035 Botley Road are complete.

- 9.1.4 Due to the sensitivity of the B3035 Botley Road, which accommodates significant traffic volumes, it is proposed that the lane closure of the B3035 Botley Road arm would be restricted to night-time working hours to minimise any potential disruption associated with the works.
- 9.1.5 The night-time lane closures are expected to be in place for up to 14 days with an allowance for up to 28 days respectively.
- 9.1.6 A summary of the proposed traffic management measures at the A334 Wickham Road/B3035 Botley Road/A334 Station Hill priority junction is provided at Table 9-1.

Table 9-1 A334 Wickham Road/B3035 Botley Road/A334 Station Hill Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
A334 Wickham Road/B3035 Botley Road/A334 Station Hill priority junction	Lane closure (night-time where practicable) on B3035 Botley Road	30m (B3035 Botley Road)	Two closures: Widening works – up to 14 days with an allowance for up to 28 days Reinstatement - up to 14 days with an allowance for up to 28 days								
Sustainable Mode Provision:	Adequate space and formal segregation to be provided where practicable for pedestrians and cyclists to pass the construction works										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		2-week restriction at Christmas/New Year No other restrictions given that works would take place at night									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						50 weeks					

9.2 St Annes Lane

- 9.2.1 A temporary construction compound will be located to the west of St Annes Lane. This temporary construction compound would be a combined site sectional/trenchless compound to facilitate the trenchless crossing of the B2177 Winchester Road and the construction of the Pipeline. Subject to vehicle tracking and additional study, it is proposed that access to this compound would be taken from St Annes Lane.

- 9.2.2 To construct the access to this temporary construction compound, a temporary road closure will be required for the period of the construction works. A temporary road closure will also be required to remove the temporary construction compound access once it is no longer required.
- 9.2.3 Each road closure (temporary access creation and removal) is expected to be in place for up to seven days and is not expected to be in place for any longer than 21 days.
- 9.2.4 A summary of the proposed traffic management measures on St Annes Lane is provided at Table 9-2.

Table 9-2 St Annes Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
St Annes Lane	Road Closure	30	Two closures Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						50 weeks					

9.3 Sandy Lane

- 9.3.1 The Pipeline will cross Sandy Lane between agricultural fields to the east and west requiring a full road closure for the period of the construction works.
- 9.3.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 9.3.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 9.3.4 It will be ensured that the closure of Sandy Lane will be scheduled to avoid coinciding with the road closure of Curdrige Lane given that this road provides a suitable and proximate east/west link between Waltham Chase and the A334 to

the west. Curdridge Lane will therefore be a designated diversion route for those travelling on Sandy Lane.

9.3.5 A summary of the proposed traffic management measures on Sandy Lane is provided at Table 9-3.

Table 9-3 Sandy Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Sandy Lane	Road Closure	20	Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Curdridge Lane (up to 35 days with an allowance of up to 105 days)						45 weeks (35 weeks worst case scenario)					

9.4 Curdridge Lane

- 9.4.1 The Pipeline will cross Curdridge Lane between agricultural fields to the south-east and north-west.
- 9.4.2 There will also be a temporary construction compound located on Curdridge Lane at the same location as the Pipeline crossing.
- 9.4.3 These elements will require three temporary lane closures with shuttle-working signals for the period of the construction works.
- 9.4.4 These lane closures will vary in duration. The lane closure associated with the Pipeline crossing is expected to take up to seven days and are not anticipated to last longer than 21 days. The lane closures associated with the creation and removal of the temporary haul road access is expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road access respectively. The lane closure associated with the creation of the

temporary construction compound accesses is expected to take up to seven days and will not take longer than 21 days, whilst the closure associated with the removal of these accesses is also expected to take up to seven days and will not take longer than 21 days. It is possible that some of these construction works may take place concurrently, and therefore the total length of time that Curdridge Lane is closed for will be reduced. This will be confirmed within the detailed TMS.

- 9.4.5 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual [4] advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction. Therefore, the length of the affected section of Curdridge Lane would total 60m.
- 9.4.6 It will be ensured that the lane closure of Curdridge Lane will be scheduled to avoid coinciding with the road closure of Sandy Lane given that this road provides a suitable and proximate alternative east/west link between Waltham Chase and the B3035 Botley Road to the west.
- 9.4.7 As Curdridge Lane is utilised by school and college bus services, lane closures will be communicated appropriately in advance of works so that any disruption to these school and college bus services can be minimised. HCC’s Passenger Transport team will also be consulted regarding the proposed traffic management at this location at the detailed TMS stage.
- 9.4.8 A summary of the proposed traffic management measures on Curdridge Lane is provided at Table 9-4.

Table 9-4 Curdridge Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Curdridge Lane	Lane closure with shuttle working signals	60	Five closures Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year Potential restriction to school/college exam periods, to be confirmed in the detailed TMS									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Sandy Lane (up to 21 days with an allowance of up to 63 days)						47 weeks (41 weeks worst case scenario)					

9.5 B3035 Botley Road

- 9.5.1 A temporary construction compound will be located to the south of the B3035 Botley Road. This temporary construction compound will comprise of a combined sectional/trenchless compound which will be used to facilitate the trenchless crossing of the B3035 Botley Road and the construction of the Pipeline. It is proposed that access to this temporary construction compound would be taken from the B3035 Botley Road.
- 9.5.2 To construct the access to this temporary construction compound, a temporary lane closure with shuttle-working signals will be required for the period of the construction works. A temporary lane closure will also be required to remove the temporary construction compound access once it is no longer required.
- 9.5.3 It is anticipated that each of these lane closures will take place for up to seven days and no longer than 21 days.

- 9.5.4 Given that this road is traffic-sensitive, works will be carried out during the night-time to minimise disruption.
- 9.5.5 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual [4] advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction. Therefore, the length of the affected section of the B3035 Botley Road would total 60m.
- 9.5.6 A summary of the proposed traffic management measures on the B3035 Botley Road is provided at Table 9-5.

Table 9-5 B3035 Botley Road Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
B3035 Botley Road	Night-time lane closure with shuttle working signals	60	Two lane closures Temporary access creation – seven days with an allowance for up to 21 days Temporary access removal – seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						50 weeks					

9.6 Trenchless construction works

- 9.6.1 There are also two trenchless construction works associated with Section J of the Pipeline. This includes crossings of:
1. St Annes Lane
 2. B3035 Botley Road.
- 9.6.2 These trenchless construction works will minimise disruption associated with the Pipeline at these locations given that traffic management measures will not be required.

10 Section K: The River Hamble to Lower Upham

10.1 Winters Hill

- 10.1.1 A temporary construction compound will be located to the south of Winters Hill. This temporary construction compound will be a trenchless compound used to facilitate the trenchless crossing of Winters Hill. It is proposed that access to this temporary construction compound would be taken from Winters Hill.
- 10.1.2 To construct the access to this temporary construction compound, a temporary lane closure with shuttle-working signals will be required for the period of the construction works. A second temporary lane closure will also be required to remove the temporary construction compound access once it is no longer required.
- 10.1.3 It is anticipated that each of these lane closures will take place for up to seven days and no longer than 21 days.
- 10.1.4 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction. Therefore, the length of the affected section of Winters Hill would total approximately 60m.
- 10.1.5 It will be ensured that the lane closure of Winters Hill will be scheduled to avoid coinciding with the road closure of Sciviers Lane given that this road provides a suitable and proximate link between the B2177 Winchester Road and Winters Hill beyond the section of affected road. Whilst it will not be a designated diversion route, it is expected that some drivers will look to bypass the affected section of Winters Hill by using Sciviers Lane.
- 10.1.6 A summary of the proposed traffic management measures on Winters Hill are set out at Table 10-1.

Table 10-1 Winters Hill Traffic Management Requirements

Location		Proposed TM		Length of TM (m)	Duration						
Winters Hill		Lane closure with shuttle working signals		60	Two closures Temporary access creation – seven days with an allowance for up to 21 days Temporary access removal – seven days with an allowance for up to 21 days						
Sustainable Mode Provision:		No existing footway/cycleway provision									
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:			Two week restriction at Christmas/New Year								
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Sciviers Lane (up to 21 days with an allowance of up to 63 days)						47 weeks (41 weeks worst case scenario)					

10.2 B2177 Winchester Road

- 10.2.1 A haul road access will be located to the south-west of the B2177 Winchester Road. This haul road will be used to provide temporary access to BPT-K/temporary construction compound K-6 and temporary construction compound K-5.
- 10.2.2 To construct the access to this haul road access, a temporary lane closure with shuttle-working signals will be required for the period of the construction works. A second temporary lane closure will also be required to remove the haul road access once it is no longer required.
- 10.2.3 Given that this road is traffic-sensitive, works will be carried out during the night-time to minimise disruption.
- 10.2.4 Each lane closure (temporary access creation and removal) is expected to be in place for up to seven days and is not expected to be in place for any longer than 21 days.
- 10.2.5 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed

15m in advance of the works in each direction. Therefore, the length of the affected section of the B2177 Winchester Road would total approximately 60m.

- 10.2.6 Given that works on the B2177 Winchester Road would take place during night-time working hours, the lane closure will avoid coinciding with the closure of Winters Hill during day-time hours. Traffic management proposals will however be scheduled to avoid coinciding with the night-time works on the B2177 Portsmouth Road.
- 10.2.7 A summary of the proposed traffic management measures on the B2177 Winchester Road are set out in Table 10-2.

Table 10-2 B2177 Winchester Road Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
B2177 Winchester Road	Lane closure (night-time where practicable) with shuttle working signals	60	Two closures Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year No other restrictions given that night-time working will be used									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
B2177 Portsmouth Road (up to 14 days with an allowance for up to 42 days)						50 weeks given night-time works are proposed					

10.3 Sciviers Lane

- 10.3.1 The Pipeline will cross Sciviers Lane between agricultural fields to the east and west, requiring a temporary road closure so that the Pipeline can cross the road.
- 10.3.2 There will also be two separate road closures associated with the construction and removal of temporary haul road accesses.
- 10.3.3 The road closure associated with the Pipeline crossing is expected to last up to seven days and no longer than 21 days. The road closures associated with the construction and removal of the temporary haul road accesses are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.

10.3.4 The closure of Sciviers Lane will be scheduled to avoid coinciding with at least one of either the lane closure on Winters Hill or the road closure on Alma Lane. This is because Winters Hill provides a suitable alternative link to Durley Street and Manor Road from the B2177 Winchester Road whilst Alma Lane provides a suitable link to Durley Hall Lane, connecting to Sciviers Lane beyond the affected section of road.

10.3.5 A summary of the proposed traffic management measures on Sciviers Lane is provided at Table 10-3.

Table 10-3 Sciviers Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Sciviers Lane	Road Closure	30	Three closures Pipeline crossing – seven days with an allowance of up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Winters Hill/Alma Lane (up to 14/21 days with an allowance of up to 42/63 days)						47 weeks (41 weeks worst case scenario)					

10.4 Alma Lane

10.4.1 The Pipeline will cross Alma Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works.

10.4.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.

- 10.4.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 10.4.4 The closure of Alma Lane will be scheduled to avoid coinciding with the road closure of Sciviers Lane given that this road provides a suitable and proximate link between Durley Hall Lane and the B2177 Winchester Road.
- 10.4.5 A summary of the proposed traffic management measures on Alma Lane is provided at Table 10-4.

Table 10-4 Alma Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Alma Lane	Road Closure	20	Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Sciviers Lane (up to 21 days with an allowance of up to 63 days)						47 weeks (41 weeks worst case scenario)					

10.5 B3037 Mortimers Lane

- 10.5.1 The Pipeline will cross the B3037 Mortimers Lane between agricultural fields to the north and south.
- 10.5.2 There will also be two temporary haul road accesses located on either side of the B3037 Mortimers Lane at the same location as the Pipeline crossing.

- 10.5.3 To construct and remove the accesses to these temporary haul roads, a temporary lane closure will be required on either side of the carriageway. A temporary lane closure will also be required on each side of the carriageway to remove the temporary haul road accesses once they are no longer required.
- 10.5.4 Given that this road is traffic-sensitive, works associated with the creation and removal of temporary accesses will be carried out during the night-time to minimise disruption. Works associated with the Pipeline crossing of the B3037 Mortimers Lane will take place during day and night as night-time restrictions would not be feasible. This is because it is not possible to re-open the road during day-time whilst the crossing works are ongoing.
- 10.5.5 It is anticipated that each lane closure will take place for up to seven days with a worst case scenario allowance of up to 21 days. The lane closure associated with the Pipeline crossing is expected to be in place for up to seven days and no longer than 21 days. In total there will be five lane closures on the B3037 Mortimers Lane (a Pipeline crossing, two x temporary haul road construction and two x temporary haul road access removal). It is possible that some of these construction works may take place concurrently, and therefore the total length of time that lane closures are in place on the B3037 Mortimers Lane will be reduced. This will be confirmed within the detailed TMS.
- 10.5.6 In addition to the length of the affected section of the road (30m), Chapter Eight of the Traffic Signs Manual [4] advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction. Therefore, the length of the affected section of the B3037 Mortimers Lane would total 50m.
- 10.5.7 It will be ensured that the lane closures on the B3037 Mortimers Lane will be scheduled to avoid coinciding with the road closure of Stroudwood Lane. Stroudwood Lane provides a connection between the B2177 Portsmouth Road and the B3037 Mortimers Lane west of the lane closure. Whilst Stroudwood Lane will not be advertised as diversion routes for traffic travelling on the B3037 Mortimers Lane, it is anticipated that some drivers may choose to divert along these routes as a result of the lane closures on the B3037 Mortimers Lane.
- 10.5.8 Similarly, works on the B3037 Mortimers Lane will not coincide with works on the B2177 Portsmouth Road in the vicinity of the B3037 Mortimers Lane so that any potential congestion issues caused by the lane closure on the B3037 are not exacerbated.
- 10.5.9 A summary of the proposed traffic management measures on the B3037 Mortimers Lane is provided at Table 10-5.

Table 10-5 B3037 Mortimers Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
B3037 Mortimers Lane	Lane closure (night-time where practicable) with shuttle-working signals for access creation and removal. Day and night-time lane closure with manual control (go/no-go signs) for Pipeline crossing.	60	Five closures Pipeline crossing – Seven days with an allowance of up to 21 days Two x Temporary haul road access creation – Seven days with an allowance of up to 21 days Two x Temporary haul road access removal – Seven days with an allowance of up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year GLOW events at Marwell Zoo (Easter/Christmas Holidays) – pipeline crossing only.									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
B2177 Portsmouth Road/ B3354 Winchester Road (up to 14 days with an allowance of up to 42 days)						46 weeks (given B2177 Portsmouth Road and B3354 Winchester Road works are both restricted to night-time)					

10.6 Trenchless construction works

- 10.6.1 Section K of the Pipeline will also cross Winters Hill, though trenchless construction works will be undertaken which would minimise disruption at this location.

11 Section L: Lower Upham to Brambridge

11.1 B2177 Portsmouth Road

- 11.1.1 A temporary construction compound access will be located to the south-west of the B2177 Portsmouth Road. This temporary construction compound will be a sectional site compound used to facilitate the construction of the Pipeline. It is proposed that access to this compound would be taken from the B2177 Portsmouth Road.
- 11.1.2 To construct the access to this temporary construction compound, a temporary lane closure with shuttle-working signals will be required for the period of the construction works. A second temporary lane closure will also be required to remove the temporary construction compound access once it is no longer required.
- 11.1.3 Given that this road is traffic-sensitive, it will be ensured that any works will be carried out during the night-time to minimise disruption.
- 11.1.4 Each lane closure (temporary access creation and removal) is expected to be in place for up to seven days and is not expected to be in place for any longer than 21 days.
- 11.1.5 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction. Therefore, the length of the affected section of the B2177 Portsmouth Road would total approximately 60m.
- 11.1.6 Given that works on the B2177 Portsmouth Road would take place during night-time working hours, the lane closure will avoid coinciding with the closure of Stroudwood Lane during day-time hours. Traffic management proposals will however be scheduled to avoid coinciding with the night-time works on the B3037 Mortimers Lane, the B3354 Winchester Road and the B2177 Winchester Road.
- 11.1.7 A summary of the proposed traffic management measures on the B2177 Portsmouth Road are set out at Table 11-1.

Table 11-1 B2177 Portsmouth Road Traffic Management Requirements

Location		Proposed TM	Length of TM (m)	Duration							
B2177 Portsmouth Road		Lane closure (night-time where practicable) with shuttle working signals	60	Two closures Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days							
Sustainable Mode Provision:		No existing footway/cycleway provision									
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year No other restrictions given that night-time working will be used									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
B3037 Mortimers Lane, B3354 Winchester Road and B2177 Winchester Road (up to 35/14/14 days with an allowance of up to 105/42/42 days)						50 weeks given night-time working is proposed					

11.2 Stroudwood Lane

- 11.2.1 The Pipeline will cross Stroudwood Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works.
- 11.2.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 11.2.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 11.2.4 Given that the nearby closures of the B2177 Portsmouth Road and the B3037 Mortimers Lane will take place during night-time, there is no requirement to avoid scheduling works on Stroudwood Lane at the same time as works on these proximate links.
- 11.2.5 Due to proximity to equestrian centres and a bridleway, Stroudwood Lane has the potential to accommodate an elevated level of equestrian movements in comparison to other roads referenced within this TMS. Special provision for

equestrians using Stroudwood Lane will be considered in detail within the detailed TMS documents.

11.2.6 A summary of the proposed traffic management measures on Stroudwood Lane is provided at Table 11-2.

Table 11-2 Stroudwood Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Stroudwood Lane	Road Closure	20	Three closures: Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision. Potential for an elevated level of equestrian movements to be considered in the detailed TMS.										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:			Four week restriction at Christmas/New Year (also accounts for Marwell Zoo GLOW event) Nine-week restriction during Marwell Zoo peak season (School summer holidays and Easter holidays respectively)								
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
B3037 Mortimers Lane/B2177 Portsmouth Road (up to 14/35 days with an allowance of up to 42/105 days)						37 weeks given night-time works are proposed on adjacent links					

11.3 B3354 Winchester Road

11.3.1 Two temporary construction compounds will be located on either side of the B3354 Winchester Road. Both temporary construction compounds will be trenchless crossing compounds which will be used to facilitate the trenchless crossing of the

- B3354 Winchester Road. It is proposed that access to these temporary construction compounds would be taken from the B3354 Winchester Road.
- 11.3.2 To construct and remove the accesses to these temporary construction compounds, a temporary lane closure with shuttle-working signals will be required for the period of the construction works. A temporary lane closure will also be required to remove the temporary construction compound accesses once they are no longer required.
- 11.3.3 Given that this road is traffic-sensitive, it will be ensured that any works will be carried out during the night-time to minimise disruption.
- 11.3.4 Given that temporary accesses are required on both sides of the B3354 Main Road, it is anticipated that each lane closure will take up to seven days and no longer than 21 days. Each set of works will be staggered to cover the accesses on either side of the B3354 Winchester Road.
- 11.3.5 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction. Therefore, the length of the affected section of the B3354 Main Road would total approximately 60m.
- 11.3.6 Given that works on the B3354 Winchester Road would take place during night-time working hours, the lane closure could coincide with the day-time closures of either the Bishopstoke Lane or the B3335 Highbridge Road. Traffic management proposals will however be scheduled to avoid coinciding with the night-time works on the B2177 Portsmouth Road and the B3037 Mortimers Lane.
- 11.3.7 The signage strategy (outlined in section 2.8) for traffic management at the B3354 Winchester Road would encompass SRN links, subject to agreement with NH, given that this route is well-used by those travelling on the SRN.
- 11.3.8 A summary of the proposed traffic management measures on the B3354 Winchester Road is provided at Table 11-3.

Table 11-3 B3354 Winchester Road Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
B3354 Winchester Road	Lane closure (night-time where practicable)	20	Two closures Temporary access creation – Seven days with an allowance of up to 21 days Temporary access removal – Seven days with an allowance of up to 21 days								
Sustainable Mode Provision:	Construction of the temporary access: Adequate space and formal segregation to be provided where practicable for pedestrians and cyclists to pass the construction works Operation of temporary access: Traffic Marshall to manage pedestrian and cycle movements in the vicinity of the access, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7).										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year No other restrictions given that night-time working will be used									
Programme Restrictions:											
Other Nearby TM:		Total Availability per Calendar Year:									
B2177 Portsmouth Road/B3037 Mortimers Lane (up to 14/35 days with an allowance of up to 42/105 days)		50 weeks given night-time working will be used									

11.4 Church Lane

- 11.4.1 A haul road will be located to the south of Church Lane. This haul road will be used to access temporary construction compounds L-8 and L-9. It is proposed that access to this haul road would be taken from Church Lane.
- 11.4.2 To construct the access to this haul road, a temporary lane closure with shuttle-working signals will be required for the period of the construction works. A second temporary lane closure will also be required to remove the temporary construction compound access once it is no longer required.
- 11.4.3 It is anticipated that each of these lane closures will take place for up to seven days and no longer than 21 days.
- 11.4.4 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual (Department for Transport, 2009) advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed

15m in advance of the works in each direction. Therefore, the length of the affected section of Church Lane would total approximately 60m.

11.4.5 Given that the nearby closures of the B3354 Winchester Road and B3335 Highbridge Road will take place during night-time, there is no requirement to avoid scheduling works on Church Lane at the same time as works on these proximate links.

11.4.6 A summary of the proposed traffic management measures on Church Lane are set out in Table 11-4.

Table 11-4 Church Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Church Lane	Lane closure with shuttle working signals	60	Two closures Temporary access creation – seven days with an allowance for up to 21 days Temporary access removal – seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	Construction of the temporary access: Adequate space and formal segregation to be provided where practicable for pedestrians and cyclists to pass the construction works. Operation of temporary access: Traffic Marshall to manage pedestrian and cycle movements in the vicinity of the access, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7).										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
N/A						50 weeks					

11.5 Bishopstoke Lane

11.5.1 The Pipeline will cross Bishopstoke Lane between agricultural fields to the east and west, requiring a full road closure for the period of the construction works length.

11.5.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.

- 11.5.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 11.5.4 Given that the nearby closure of the B3354 Winchester Road will take place during night-time, there is no requirement to avoid scheduling works on Bishopstoke Lane at the same time as works on this proximate link.
- 11.5.5 A summary of the proposed traffic management measures on Bishopstoke Lane is provided at Table 11-5.

Table 11-5 Bishopstoke Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Bishopstoke Lane	Road Closure	20	Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
B3354 Winchester Road/B3335 Highbridge Road (up to 14 days with an allowance of up to 42 days)						50 weeks given that night-time working will be used on adjacent links					

11.6 B3335 Highbridge Road

- 11.6.1 A temporary construction compound will be located to the east of the B3335 Highbridge Road. This temporary construction compound will comprise of a tunnel launch site which will facilitate the construction of the Pipeline. It is proposed that access to this temporary construction compound would be taken from the B3335 Highbridge Road.

- 11.6.2 To construct the access to this temporary construction compound, a temporary lane closure with shuttle-working and temporary signals will be required for the period of the construction works. A temporary lane closure will also be required to remove the temporary construction compound access once it is no longer required. As detailed in section 2.4, these works would be undertaken overnight.
- 11.6.3 It is anticipated that each of these lane closures will take place for up to seven days and no longer than 21 days.
- 11.6.4 In addition to the length of the affected section of the road (approximately 30m), Chapter Eight of the Traffic Signs Manual [4] advises that the “WHEN RED LIGHT SHOWS WAIT HERE” sign (7011) is placed 15m in advance of the works in each direction. Therefore, the length of the affected section of the B3335 Highbridge Road would total 60m.
- 11.6.5 The lane closure on the B3335 Highbridge Road could be scheduled alongside the closure of Bishopstoke Lane given that night-time working is proposed for the B3335 Highbridge Road.
- 11.6.6 A summary of the proposed traffic management measures on the B3335 Highbridge Road is provided at Table 11-6.

Table 11-6 B3335 Highbridge Road Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
B3335 Highbridge Road	Lane Closure with shuttle-working signals	60	Two closures Temporary access creation – up to seven days with an allowance for up to 21 days Temporary access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	Construction of the temporary access: Adequate space and formal segregation to be provided where practicable for pedestrians and cyclists to pass the construction works Temporary bus stop closure and relocation proposed Operation of temporary access: Traffic Marshall to manage pedestrian and cycle movements in the vicinity of the access, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7).										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
Bishopstoke Lane (up to 21 days with an allowance of up to 63 days)						50 weeks given night-time working would be used					

11.7 Trenchless construction works

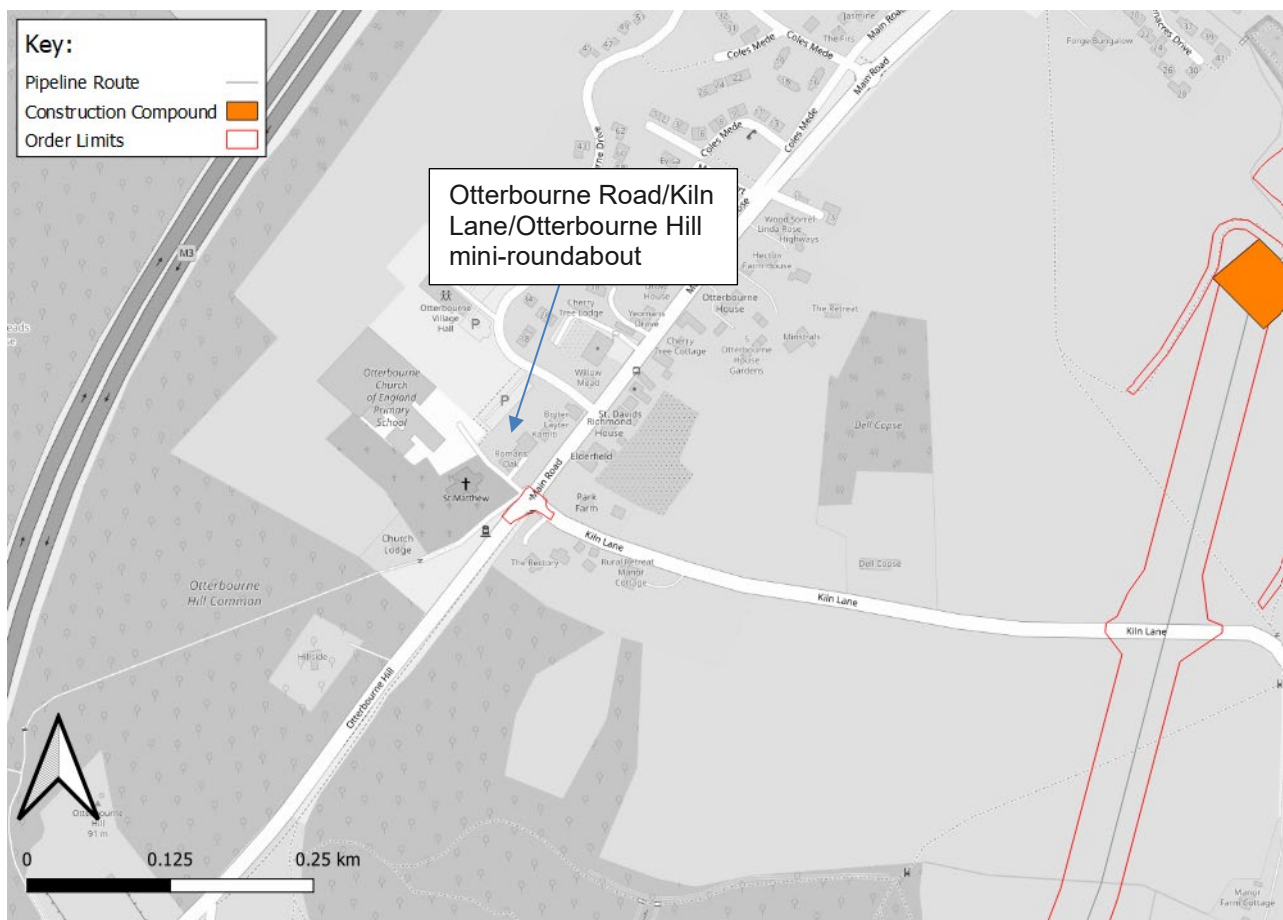
- 11.7.1 The B3354 Winchester Road and the B3035 Highbridge Road will be crossed by Section L of the Pipeline using trenchless construction works which would minimise disruption.

12 Section M: Brambridge to Otterbourne Water Supply Works

12.1 Otterbourne Road/Kiln Lane/Otterbourne Hill mini-roundabout

12.1.1 Off-site works may be required at the Otterbourne Road/Kiln Lane/ Otterbourne Hill mini-roundabout to facilitate HGV access to temporary construction compounds M-1 and M-2, as detailed in the Framework CTMP (Document reference 7.2, DCO Volume 7). The location of these works is shown at Graphic 12-1.

Graphic 12-1 Otterbourne Road/Kiln Lane/Otterbourne Hill mini-roundabout



12.1.2 These works could comprise of minor widening works to the Kiln Lane arm of the junction as well as works to the pedestrian refuge islands on this entry and the Otterbourne Hill entry to the mini-roundabout. The widening works may be temporary, in which case the local highway network would be subsequently reinstated to its existing condition, or they may be permanent in which case reinstatement works may not be required.

12.1.3 The minor widening works would require a temporary road closure on Kiln Lane and a temporary lane closure on both Otterbourne Road and Otterbourne Hill.

Should reinstatement be required, a second temporary road closure would be required on Kiln Lane as well as a second temporary lane closure on Otterbourne Road and Otterbourne Hill.

- 12.1.4 The works to the refuge island on Kiln Lane and traffic island on Otterbourne Hill would require a temporary road closure on Kiln Lane. They would require a second road closure of Kiln Lane to reinstate the island back to its original condition.
- 12.1.5 Due to the sensitivity of this junction, which accommodates significant traffic volumes and is used as a designated diversion route by National Highways when there are issues on the M3, it is proposed that works to Otterbourne Hill and Otterbourne Road would take place during night-time working hours to minimise any potential disruption as a result of traffic management. Night-time working would not be required on Kiln Lane given that this route accommodates relatively low volumes of traffic and does not serve as a National Highways designated diversion route.
- 12.1.6 Access to properties will be maintained throughout these temporary road and lane closures through a Traffic Marshall's supervision.
- 12.1.7 The lane and road closures associated with minor widening works are expected to be in place for up to 14 days with an allowance for up to 28 days.
- 12.1.8 The road closures associated with the works to the pedestrian refuge island on Kiln Lane are expected to be in place for up to 7 days with an allowance for up to 14 days.
- 12.1.9 Given that works on the nearby B3335 Highbridge Road would take place during night-time working hours, the road closure of Kiln Lane will avoid coinciding with the closure of the B3335 Highbridge Road during day-time hours.
- 12.1.10 A summary of the proposed traffic management measures at the Otterbourne Road/Kiln Lane/Otterbourne Hill priority junction is provided at Table 12-1.

Table 12-1 Otterbourne Road/Kiln Lane/Otterbourne Hill mini-roundabout Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Otterbourne Road/Kiln Lane/Otterbourne Hill mini-roundabout	Lane closure (night-time where practicable) on Otterbourne Hill/Otterbourne Road. Road closure on Kiln Lane	30m	Up to four potential closures: Widening – up to 14 days with an allowance for up to 28 days Works to pedestrian refuge island – up to seven days with an allowance for up to 14 days Reinstatement (widening) – up to 14 days with an allowance for up to 28 days Reinstatement (pedestrian refuge island) – up to seven days with an allowance for up to 14 days								
Sustainable Mode Provision:	If required, cycles may need to join general traffic on Otterbourne Hill/Otterbourne Road, with appropriate lane width and accompanying signage to provide awareness that cycles should not be passed by vehicles. Adequate space and formal segregation to be provided for pedestrians										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:						Total Availability per Calendar Year:					
B3335 Highbridge Road (up to 14 days with an allowance of up to 42 days)						50 weeks given that night-time working will be applied on B335 Highbridge Road					

12.2 Kiln Lane

- 12.2.1 The Pipeline will cross Kiln Lane between agricultural fields to the north and south.
- 12.2.2 The road closure associated with the Pipeline crossing is expected to last up to seven days and is not expected to last longer than 21 days.
- 12.2.3 There will also be two separate road closures associated with the creation and removal of temporary haul road accesses on either side of the road. These are expected to take up to seven days with an allowance for up to 21 days for the construction and removal of the haul road accesses respectively.
- 12.2.4 A summary of the proposed traffic management measures on Kiln Lane is provided at Table 12-2.

Table 12-2 Kiln Lane Traffic Management Requirements

Location	Proposed TM	Length of TM (m)	Duration								
Kiln Lane	Road Closure	20	Pipeline crossing – up to seven days with an allowance for up to 21 days Temporary haul road access creation – up to seven days with an allowance for up to 21 days Temporary haul road access removal – up to seven days with an allowance for up to 21 days								
Sustainable Mode Provision:	No existing footway/cycleway provision										
Calendar Restrictions:											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Details of Restrictions:		Two week restriction at Christmas/New Year									
Programme Restrictions:											
Other Nearby TM:		Total Availability per Calendar Year:									
B3335 Highbridge Road (up to 14 days with an allowance of up to 42 days)		50 weeks given that B3335 Highbridge Road works would take place at night									

13 Traffic Management Strategy summary

- 13.1.1 This TMS has been prepared in support of the proposed Hampshire Water Transfer and Water Recycling Project (the 'Project').
- 13.1.2 The Project is being progressed by The Applicant. The Applicant is responsible for supplying water and providing wastewater services to over four million customers in the South East of England, operating across Hampshire, Kent, the Isle of Wight and East and West Sussex.
- 13.1.3 This TMS provides a strategy as to how traffic management would be required and implemented, expected duration of the works, and any calendar and programme restrictions. It sets out the notice periods for construction works and the responsive traffic management protocols. This TMS has been submitted as part of the DCO application documents.
- 13.1.4 This TMS sets out details of lane and road closures to be carried out during the construction phase of the Project. These management measures will minimise the impact of the Project on traffic.
- 13.1.5 This TMS also sets out a strategy for how vulnerable road users, pedestrians and cyclists will be accommodated during the works, whilst also outlining methods for facilitating emergency service access and providing a responsive traffic management protocol.

Glossary and abbreviations

Glossary term	Description
Community Safety Accreditation Scheme	Provides a limited range of police powers to employees of non-police organisations. Accreditation allows staff members to provide an additional uniformed presence in communities.
Stakeholder and Customer Communications Plan	The strategy for notifying the public and raising awareness of the construction activities associated with the Project.
Contractor	The Applicant or a person appointed by the Applicant or by anyone else having the benefit of part or all of the Development Consent Order to carry out any construction element of the Project or to operate Project.
Order Limits	The 'Order Limits' represent the extent of the area within which the Project, authorised by the Development Consent Order, may be carried out, including the permanent and temporary land needed for construction, operation and maintenance activities. The Order Limits are shown on the Works plans (Document reference 2.3, DCO Volume 2) and Land plans (Document reference 2.2, DCO Volume 2).
Construction Traffic Management Plan (CTMP) (Document reference 7.2, DCO Volume 7)	<p>Outlines the overarching scope of the individual CTMP document(s) which will be submitted post-consent.</p> <p>The Framework CTMP provides an overarching plan as to how the construction traffic will be managed. It outlines the framework for the detailed CTMPs to be produced and submitted for approval by the relevant authority before construction works can commence.</p> <p>The measures contained in the Framework CTMP are secured by a requirement in Schedule 2 to the Development Consent Order. A detailed CTMP will be produced and submitted for approval in accordance with the corresponding requirement in Schedule 2 to the draft Development Consent Order (Document reference 3.1, DCO Volume 3).</p>
Development Consent Order (DCO)	A statutory order which provides consent for a project and means that a range of other consents, such as planning permission and listed building consent, will not be required. A DCO can also include powers authorising the compulsory acquisition and temporary possession of land and rights over land which is the subject of an application. A draft DCO (Document reference 3.1, DCO Volume 3) is submitted by the applicant as part of its application [6].
Haul roads	Temporary tracks or roads set aside to facilitate transport access to sections of Order Limits to facilitate the construction of the Project.
Non-motorised User (NMU)	Road users that travel by non-car modes (primarily those who walk or cycle).
Permit Scheme	Statutory scheme made by a local highway authority under the Traffic Management Act 2004 in order to manage street and roadwork activities on the public highway.
Project	This refers to the proposed Hampshire Water Transfer and Water Recycling Project, as described in Environment Statement Chapter 3 Description of the Proposed Development, Volume I (Document reference 6.1, DCO Volume 6).

Glossary term	Description
Provisional Advance Authorisation	A provisional permit granted before the final details of an activity have been finalised.
Signage Strategy	A strategy outlining how signage will be organised to communicate traffic management measures to road users.
Technical Specification	A document issued to the Contractor as part of the construction tender process. This document will specify the required materials used in the construction process, whilst also outlining the principles inherent within the construction process.
Travel Demand Management Strategy	A strategy tailored towards enacting a reduction in vehicle trips.
Trenchless crossings	Crossings where trenchless installation techniques will be used during construction of the Project.

References

- [1] HM Government, "New Roads and Street Works Act," 1991.
- [2] Department for Transport, New Roads and Street Works Act 1991: Code of Practice of Co-ordination of Street Works and Works for Road Purposes and Related Matters, 2012.
- [3] Department for Transport, Safety at Streetworks and Roadworks: A Code of Practice, 2013.
- [4] Department for Transport, Traffic Signs Manual Chapter 8: Traffic Safety Measures and Signs for Roadworks and Temporary Situations, 2009.
- [5] Transport for London, "Temporary Traffic Management Handbook," 2018.
- [6] Planning Inspectorate, "Nationally Significant Infrastructure Projects: Terms commonly used in the process," 2025. [Online]. Available: https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-terms-commonly-used-in-the-process?utm_medium=email&utm_campaign=govuk-notifications-topic&utm_source=0f8aa6eb-cfc8-41a1-af95-a3404f6622b5&utm_content=daily#development-consent-ord.



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The Southern Water logo graphic consists of three white, stylized wavy lines that resemble water waves, positioned to the right of the word "Water".