Proposed Residential Development
Land at Downlands Farm, Uckfield

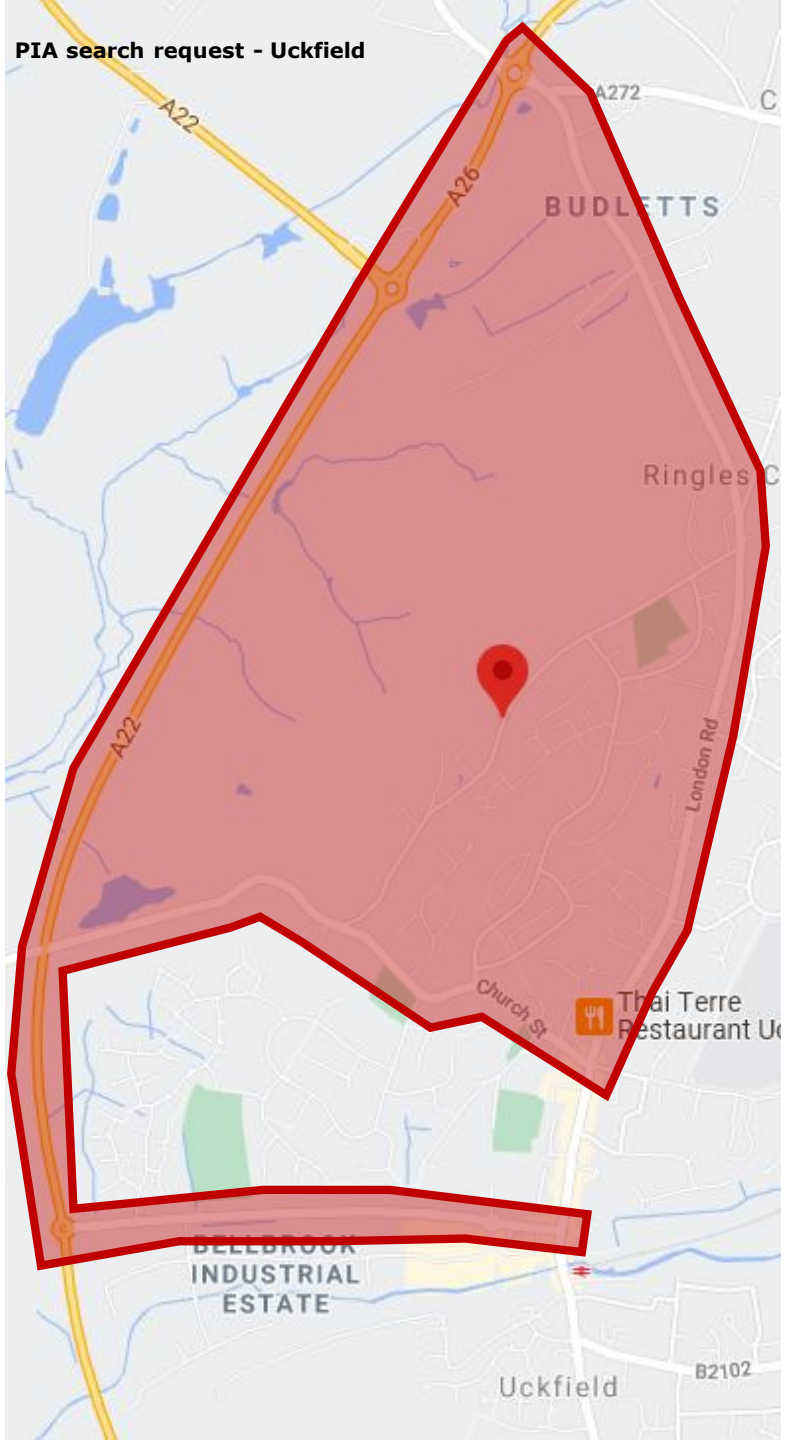
Transport Assessment Appendices

motion

Appendix A

Personal Injury Accident Study Area

PIA search request - Uckfield



Appendix B

Non-Motorised User Audit

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1.0 Introduction

Overview

1.1 This Non-Motorised User (NMU) Audit has been prepared on behalf of Gleeson Land pursuant to pre-application advice received from East Sussex County Council (ESCC) in respect of the proposed development of land at Downlands Farm, Uckfield (the site) with up to 430 dwellings.

1.2 The site is located to the north of Uckfield and east of the A22 and lies within the administration boundaries of Wealden District Council (WDC) and ESCC.

1.3 The remainder of this section outlines the scope of the audit, scoring system and provides a summary of the audit recommendations. The next section of this report sets out the walking audit and section 3 sets out the cycling audit. Section 4 makes recommendations on the key issues to be addressed to support residential development of the site.

Scope of Audit

1.4 This audit assesses the quality of a number of existing routes for pedestrians and cyclists between the site and core amenities (such as employment, education, health and leisure) within 2 kilometres. The plan below identifies the directions of travel to these core destinations, including the town centre, railway station, Bellbrook Industrial Estate and Meads Medical Centre and Uckfield College and Leisure Centre.

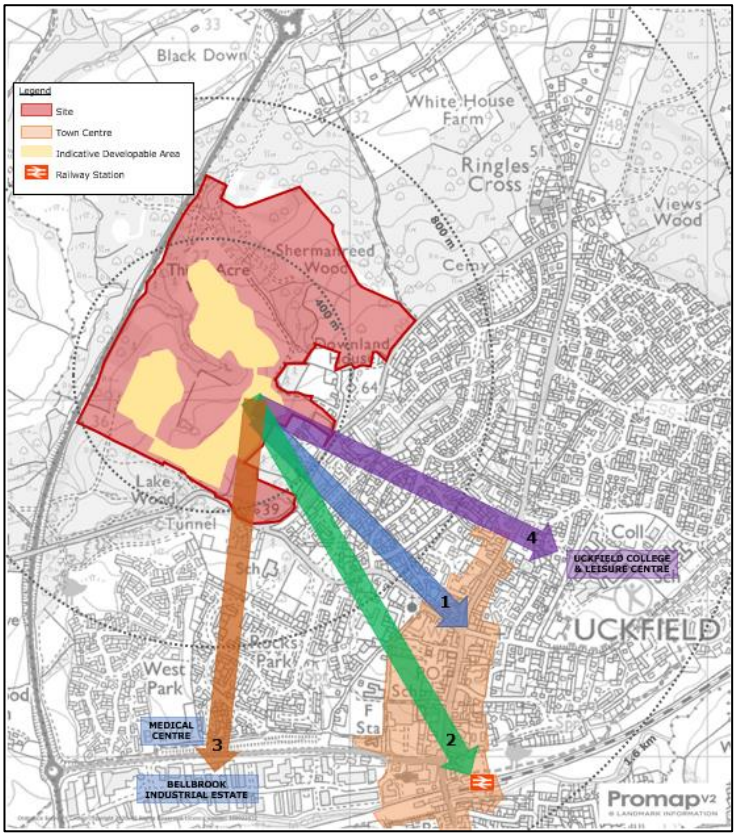


Figure 1.1 – Direction of Travel to Core Destinations

1.5 There are a some amenities within 2 kilometres of the site located to the north, such as within Maresfield and Ashdown Business Park. However, the amenities within Uckfield are closer in terms of proximity to the area of the site proposed for residential development and offer a wider selection compared to those in Maresfield. Further, employment opportunities are available in the town and access to Ashdown Business Park is considered as part of the proposed community bus service. As such, the audit does not cover routes to these destinations.

Scoring

1.6 A number of routes between the site and the four selected destinations have been identified. Each route has been broken down into 'links', which have then been scored against the following criteria:

- Directness;
- Width;
- Gradient;
- Lighting;
- Surveillance;
- Environment; and
- Crossing provision.

1.7 Each criteria has been scored from 1 to 5, with 1 generally representing poor characteristics and 5 excellent characteristics. The criteria and scoring guidelines are provided in **Appendix A**.

1.8 It will not always be possible to change certain factors considered in the scoring of the identified routes, such as directness and gradients such as through residential areas. These factors are only therefore commented on insofar as the influence they have on the use of particular routes.

Key Issues & Recommendations

1.9 The overall scores assigned to the routes and individual link scores have been used to identify existing constraints of the separate routes for pedestrian and cycle use.

1.10 Where applicable, recommendations are made for key issues to be addressed along identified routes. These recommendations have been made having regard to the anticipated future use by pedestrians and cyclists associated with future residential development on land at Downlands Farm. Consideration is also given to potential enhancements outlined in the Uckfield Local Cycling and Walking Infrastructure Plan (LCWIP June 2018, consulted upon as part of the East Sussex Cycling and Walking Strategy in December 2020), where appropriate.

1.11 In summary, the following key issues are recommended to be addressed to deliver suitable pedestrian and cycle links between the site and core destinations:

- Gaps and narrow sections of footway along existing pedestrian and/or cycle routes between the site and the town, railway station and industrial estate;
- Poor, or no crossing provision on desire lines between the site and core destinations that are suitable for intended user groups;
- Short sections of existing routes with steep gradients, overgrown paths and unmade surfacing; and
- Poor pedestrian and cycle priority on the approaches to the town.

2.0 Walking Audit

2.1 This section presents an overview of the walking audit. The full walking audit output is set out within **Appendix B**, and describes each individual link and appropriate score for each criteria being assessed.

2.2 Whilst the routes considered include the approximate distance through the site, from the centre of the developable area to the public highway, this audit only considers the quality of the routes external to the site. Routes through the development will be designed having regard to relevant standards and guidance.

Routes to Uckfield Town Centre (W1)

2.3 Figure 2.1 illustrates the potential routes that could be taken by future residents to access Uckfield town centre.

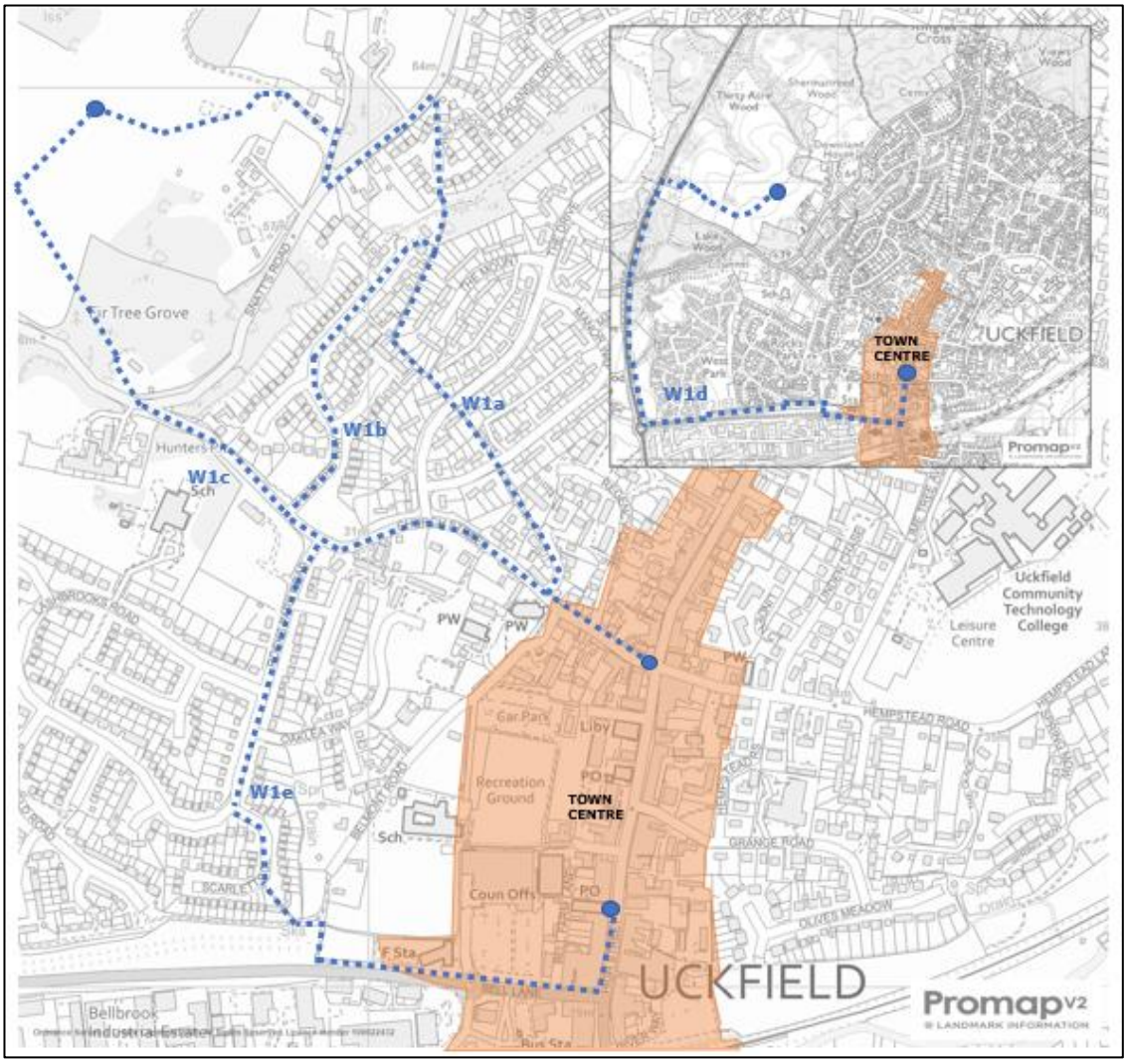


Figure 2.1: Routes to Uckfield Town Centre

Route W1a: Snatts Road via public footpath (and steps) and Pudding Cake Lane

2.4 This route is approximately 1.3 kilometres in length and connects to Snatts Road approximately 150 metres to the south-west of an existing alleyway leading to Downland Copse. The route continues down the existing alleyway to Downland Copse and onto a public right of way via a series of steps and an unmade path through an old quarry. The route crosses The Drive and Manor Way and leads onto Pudding Cake Lane, which meets Church Street and connects to the High Street to the east.

2.5 The route is considered to be fairly direct, although it is recognised that the initial section does not follow a natural desire line and is not easily legible. No footway exists on Snatts Road up to the existing alleyway and width of the remainder of the route is reflective of an existing network of alleys/footpaths cutting through a residential area. One particular section (after the existing steps and before The Drive) is particularly narrow due to overgrown vegetation. Pudding Cake Lane operates as a shared surface and the footway on Church Street is narrow. The route is generally level with some gentle gradients closer to the site, although the existing steps from Downland Copse onto the public footpath are very steep. The sections of route following existing roads are generally lit (with the exception of Snatts Road), but the remainder of the route is unlit. Likewise, there is good natural surveillance where the route follows existing roads, but surveillance is poor along the alleyways. Generally the environment is pleasant, away from busy roads and cutting through a residential area. There is no crossing provision on Snatts Road, where the footpath crosses The Drive or Manor Way and on Church Street.

Route W1b: Snatts Road via public footpath (and steps) and Hunters Way

2.6 This route follows the same beginning/end as route as W1a, but diverts to Hunters Way after the existing steps, avoiding the existing footpath/alleyways and joining Rocks Road, which then leads onto Church Street. The issues identified for Snatts Road and the latter end of Church Street therefore are also relevant to this route, which totals circa 1.5 kilometres in length.

2.7 Hunters Way is an existing residential road, benefitting from good quality, lit footways on a gentle gradient. The footway meets existing footways on Rocks Road, which lead east onto Church Street. The footway on Church Street narrows a short distance towards the High Street. Whilst the route is less direct than route W1a, the overall quality in terms of width, lighting, environment and surveillance is better, with the exception of the short section down the existing steep steps off Downland Copse.

Route W1c: Rocks Road/Church Street

2.8 The third route towards the town connects to Rocks Road, which leads east onto Church Street. The route is approximately 1.1 kilometre in length and forms the most direct connection between the site and the town centre.

2.9 The existing footway on Rocks Road is narrow, unlit and follows a gentle gradient towards the built-up area, where the speed limit reduces to 30 miles per hour (mph) from the national speed limit. There is no crossing provision on Rocks Road to connect to the existing footway on the northern side of the road, which commences a short distance before Hunters Way. The route then follows the same line as route W1b described above.

Route W1d: A22/Bellfarm Road

2.10 This route, is the only route considered from the new site access down the A22, then following Bellfarm Road towards the High Street. The route is the longest of those considered at 2.7 kilometres and included as it provides the most level option between the site and the town centre.

2.11 There is no existing footway along the A22 between the proposed point of access and Copwood roundabout, or the initial section of Bellfarm Road up to Batchelor Way. This section is lit, although is subject to high traffic volumes and a speed limit of 60 mph, which reduces to 40mph on Bellfarm Road. From this point, the route provides a good quality, lit route and pleasant environment for pedestrians, largely separated from vehicular traffic with suitable crossing provision.

Route W1e: Rocks Road/Rocks Park Road towards Bellfarm Road and High Street

2.12 The final pedestrian route to the town centres follows Rocks Road and leads south along Rocks Park Road towards Bellfarm Road, via Scarlett Close. The route is circa 1.7 kilometres and uses a mix of residential roads, alleyways and footpaths.

2.13 The initial section of the route is the same as for route W1c. Rather than continuing to the top of the town via Church Street, the route continues through the residential area off Rocks Park Road and onto Scarletts Close, which include good quality lit footways. There is a gentle gradient along Rocks Park Road, which descends along Scarletts Close towards an existing unlit alleyway, where cycling is prohibited. The alley connects to the existing shared foot/cyclepath to the north of Bellfarm Road. Whilst this route provides a good quality connection for pedestrians, natural surveillance is only from the carriageway. The route continues east towards the town, and the end of route W1d described above.

Routes to Uckfield Railway Station (W2)

2.14 Figure 2.2 illustrates the potential routes that could be taken by future residents to access Uckfield railway station. These routes reflect those considered towards the town centre (W1a to e), although also take into account the High Street from Church Street to the railway station. The commentary below therefore focuses on this section only. Reference should be made to the routes to the town centre considered above, which provide commentary on the quality of the remainder of the routes considered.

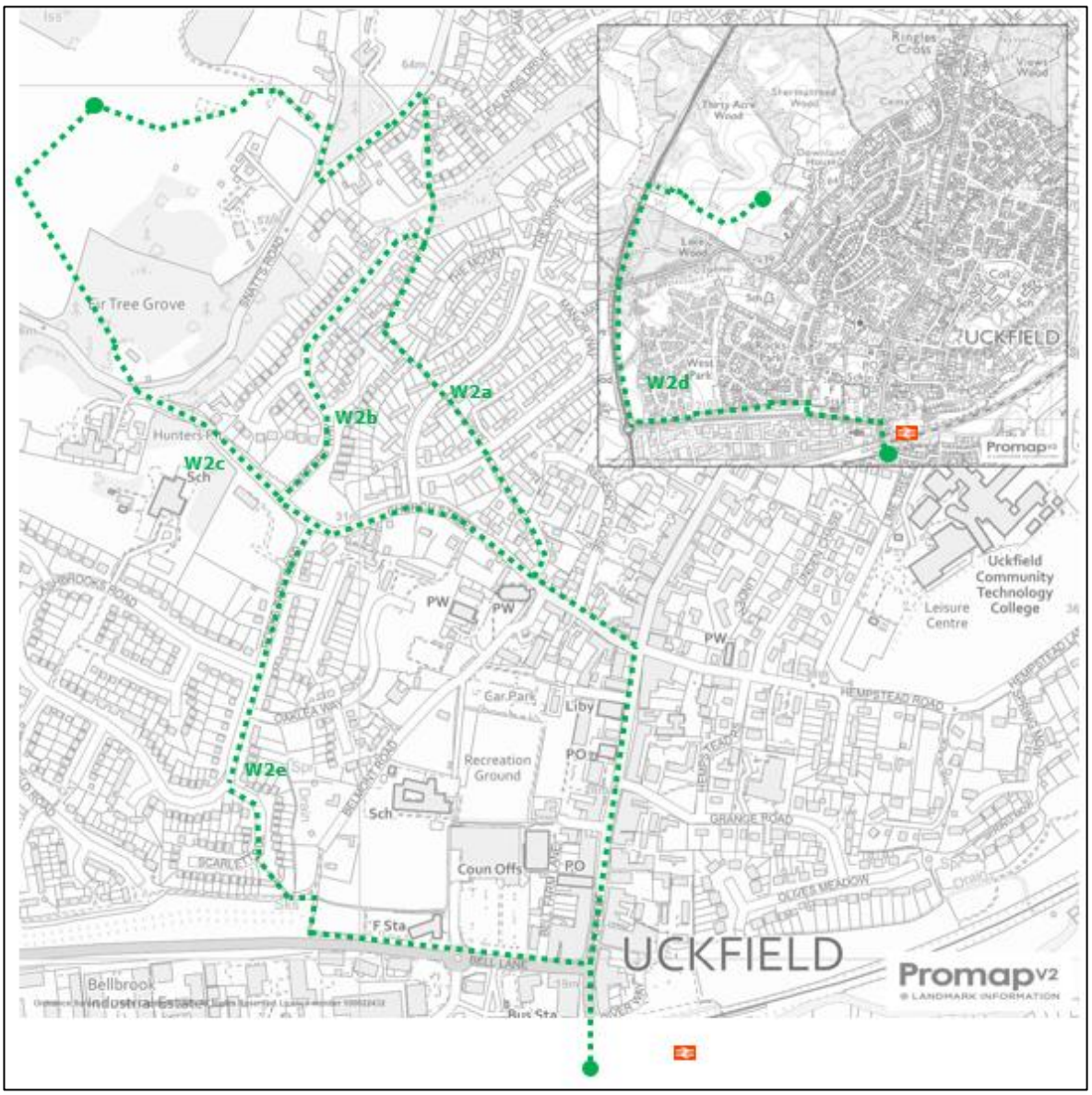


Figure 2.2: Routes to Uckfield Railway Station

2.15 The most direct routes to the railway station are via Rocks Road/Church Street (W2c) and Rocks Road/Rocks Park Road (W2e), both at approximately 1.6 kilometres in length.

2.16 The High Street between Church Street and the railway station is a straight route with a downhill gradient towards the station, within the town centre 20mph zone. The route includes good quality, lit footways on either side of the road, which are narrow in places, particularly closer to the Church Street junction and around the railway station. The route has good natural surveillance and generally provides an attractive environment for pedestrians. There are a number of crossings along the High Street on this section, which assist east/west movement, including uncontrolled crossings at the Church Street junction and a couple of signalised crossings spaced along the route.

Routes to Bellbrook Industrial Estate & Meads Medical Centre (W3)

2.17 Figure 2.3 illustrates the potential routes that could be taken by future residents to access Bellbrook Industrial Estate and Meads medical centre.

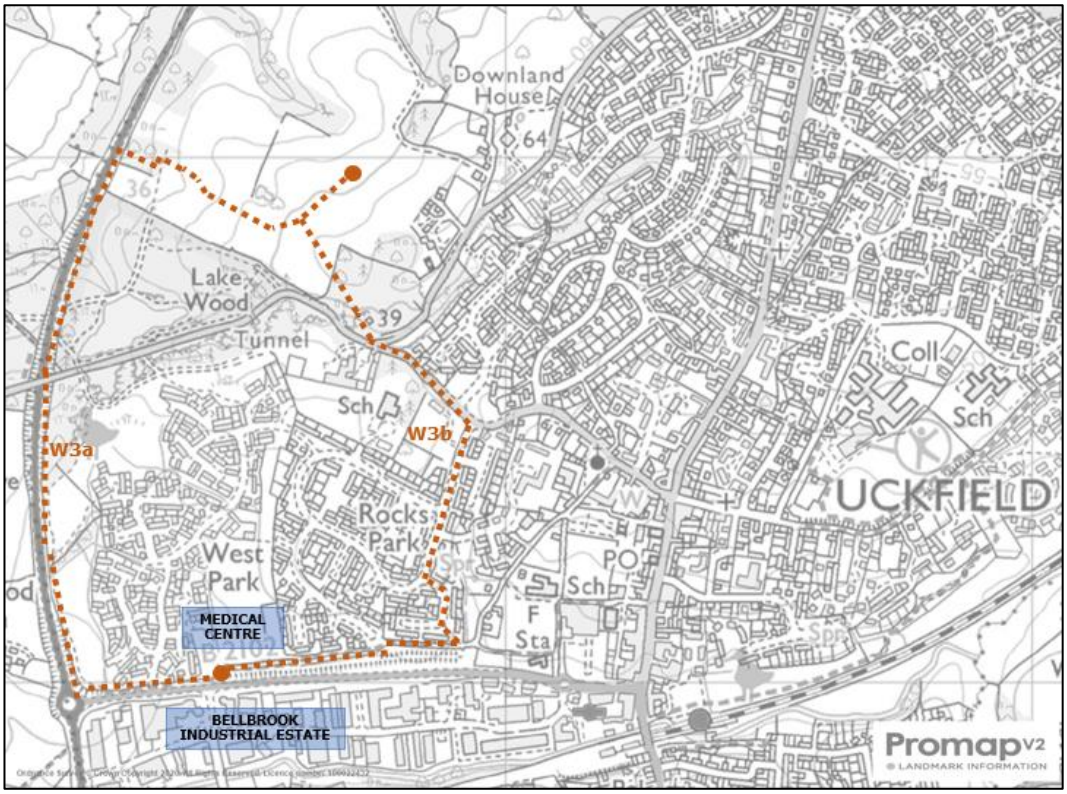


Figure 2.3: Routes to Bellbrook Industrial Estate & Meads Medical Centre

Route W3a: A22/Bellfarm Road

2.18 This route follows the same initial section as W1d considered above. The route is circa 1.9 kilometres in length and uses the new site access down the A22, then turning into Bellfarm Road.

2.19 There is no existing footway along the A22 between the proposed point of access and Copwood roundabout, or the initial section of Bellfarm Road up to Batchelor Way. This section is lit, although is subject to high traffic volumes and a speed limit of 60 mph, which reduces to 40mph on Bellfarm Road. From Batchelor Way, there is an existing footpath along the northern side of the road, separated from the carriageway by a grass verge. This section of the route provides a good quality, lit route and pleasant environment for pedestrians accessing the medical centre. To access the industrial estate, there is an uncontrolled crossing to the east of the junction with Brookside/Bell Lane, which includes a central refuge and connects with an existing footway leading into the industrial estate. The crossing is off the natural desire line for those wishing to access the industrial estate from this direction.

Route W3b: Rocks Road/Rocks Park Road towards Bellfarm Road

2.20 This route largely follows the line of route W1e considered above, but at the end of the alleyway off Scarlett Close, heads west, rather than east. The route is circa 1.5 kilometres in length and as described above, uses a mix of residential roads, alleyways and footpaths.

2.21 From where the alleyway off Scarletts Close meets the existing foot/cycle path, the route benefits from a good width, is level, includes some lighting and is generally a pleasant environment, although there are some parts within limited natural surveillance. The foot/cycle path leads directly to the medical centre and the crossing described for route W3a would be used to access the industrial estate, following the natural desire line.

Routes to Uckfield College & Leisure Centre (W4)

2.22 Figure 2.4 illustrates the potential routes that could be taken by future residents to access Uckfield college and leisure centre (as well as Manor Primary School). The college provides education for pupils aged 11 to 18 an the leisure centre includes a pool with sports pitches, hall and fitness studios.

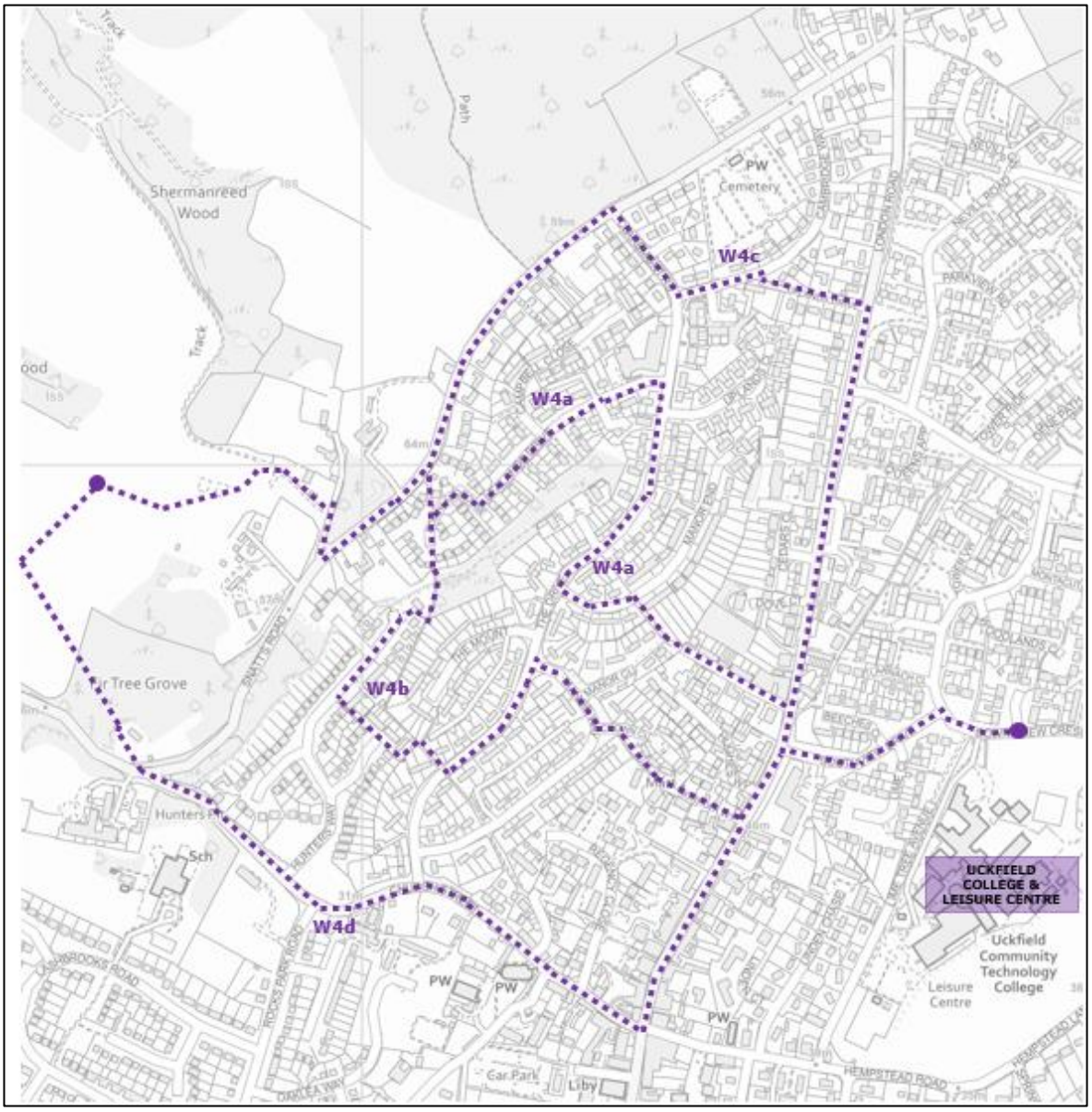


Figure 2.2: Routes to Uckfield College & Leisure Centre

Route W4a: Snatts Road via public footpath and Lealands Drive to Southview Drive

2.23 This route is approximately 1.8 kilometres in length and uses a combination of alleyways, shared surfaces and residential roads. The route exits the site onto Snatts Road and leads north-east towards the alleyway to Downlands Copse, previously described (route W1a).

2.24 It then follows the residential roads of Lealands Drive, The Drive and Manor End, which include good quality lit footways with good natural surveillance. These roads include a sloping gradient. Manor End connects to North Row via an existing alleyway, leading onto a shared surface. This section of the route is generally overlooked by nearby dwellings and has a gentle gradient and intermittent lighting. There is short, narrow section of footway on North Row towards London Road. The footways on London Road are lit and overlooked. The footway on the eastern side of the road is narrow in this location and there is no crossing provision on London Road at this point. Footways continue along Southview Drive, separated from the carriageway by grass verge. The footway along the northern side is at a higher level than the carriageway and has a greater gradient that the route along the southern side of the road. Lighting is also only available on the southern side of the road. There is a gentle climb towards Downsview Crescent, where lit footways continue towards the school and leisure centre. These residential roads have good natural surveillance.

Route W4b: Snatts Road via public footpath (and steps) to Hunters Way, London Road and Southview Drive

2.25 An alternative route to Uckfield college and leisure centre, which is also approximately 1.8 kilometres is via the public footpath and steps through the former quarry, picking up residential roads and existing alleyways through to London Road and onto Southview Drive/Downsview Crescent.

2.26 The condition of the route from the site along Snatts Road, through the alley to Downland Copse, along the public footpath to Hunters Way has previously been described in route W1b above. This route follows a short section of Hunters Way and connects back to the public footpath via an existing alleyway through the residential area and a number of garages. The alley is unlit and has limited natural surveillance. The public footpath leads across The Drive and onto Manor Way, a residential road with good quality, lit footways connecting to Crown Close. A footway extends along Crown Close connecting with a narrow footpath cutting through to Norfolk Way, a narrow unlit shared surface leading to London Road. The footways on London Road leading north to Southview Drive are good quality and lit, with good natural surveillance. Thye footway on the eastern side of the road is narrow and there is no crossing provision in this location. The route then follows Southview Drive/Downsview Crescent as described previously for route W4a.

Route W4c: Snatts Road via Claremont Rise to London Road and Southview Drive

2.27 A variation to route W4a is exiting the site onto Snatts Road and following this up to Claremont Rise, Cambridge Way and Uplands Drive to connect to London Road. This route is circa 2 kilometres and generally is along roads through the residential area to the east of the site. The routes generally include good quality, lit footways, which are overlooked. There is no crossing provision on Snatts Road and a section with no footway (close to the site, as previously described). There is a significant gradient on Claremont Rise but the route levels out along Cambridge Rise, which connects to Uplands Drive via a short footpath. Uplands Drive is an unlit shared surface but generally provides a good quality route to London Road. The footways south along London Road are lit and well overlooked, with that on the eastern side separated from the carriageway by grass verge up to Browns Lane. There is an informal crossing on London Road to the south of this junction. To the south of the junction, the footways are generally narrower, with a short gap in provision on the eastern side around Dove Court. The route is then as described from North Row in route W4a to the college and leisure centre. As an alternative, pedestrians could turn down Browns Lane and follow the footways onto Downsview Crescent to access the school and leisure centre, which is a similar length with good quality links.

Route W4d: Rocks Road/Church Street to High Street and up to Southview Drive

2.28 The most direct route is approximately 1.7 kilometres in length and departs the site onto Rocks Road, following route W1c to the town centre. Where Church Street meets the High Street, the route then leads north towards Southview Drive.

2.29 The High Street between Church Street and Southview Drive gently climbs moving from the 20mph zone to the 30mph section of the road. There are lit footways on both sides of the road, which are narrower on the eastern side. The High Street includes active frontages and so there is a good level of natural surveillance. There is a signalised crossing a short distance to the south of Bedford Court. The footways continue north to Southview Drive, with the section on the eastern side after Bedford Court generally narrower than on the western side of the road. The route then follows the residential roads previously described.

3.0 Cycling Audit

3.1 This section presents an overview of the cycling audit. The full cycling audit output is set out within **Appendix C**, and describes each individual link and appropriate score for each criteria being assessed.

Routes to Uckfield Town Centre (C1)

3.2 Figure 3.1 illustrates the potential routes that could be taken by future residents to access Uckfield town centre.

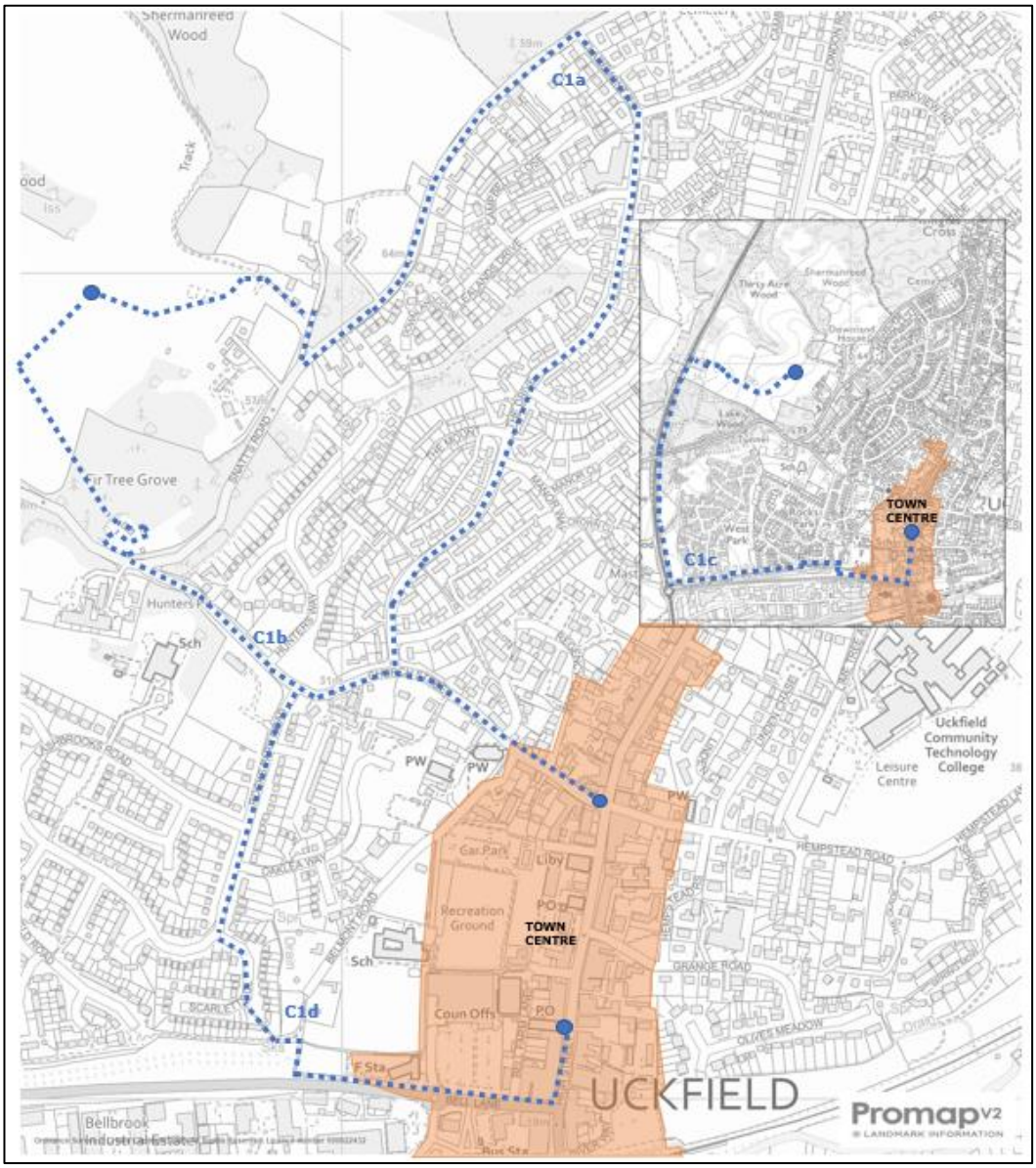


Figure 3.1: Routes to Uckfield Town Centre

Route C1a: Snatts Road/The Drive/Church Street

3.3 Route C1a is approximately 2.1 kilometres in length and uses the existing residential roads, including Snatts Road, Claremont Rise, The Drive and Church Street to access the town centre. The majority of the route benefits from good natural surveillance, passing through the residential estate and town, with the roads towards the north generally falling down towards the town. The majority of the route is lit, with the exception of a small section on Snatts Road close to the site.

Route C1b: Rocks Road/Church Street

3.4 The most direct cycle route to the town is via Rocks Road/Church Street using the existing carriageway, measuring circa 1.2 kilometres. The speed limit on Rocks Road reduces from the national speed limit to 30mph on entering the built-up area and reduces further to 20mph along Church Street. The majority of the route is attractive for cyclists in terms of speed limits and gradient, although the initial section of Rocks Road is unlit and narrow.

Route C1c: A22/Bellfarm Road

3.5 This route, measuring circa 2.7 kilometres, exits the site access and leads south down the A22, then following Bellfarm Road towards the High Street. The route provides the most level option between the site and the town centre.

3.6 There are no existing cycle facilities along the A22 between the proposed point of access and Copwood roundabout, or the initial section of Bellfarm Road up approximately Brookside. As such, cyclists would utilise the existing carriageway. This section is lit, although is subject to high traffic volumes and a speed limit of 60mph, which reduces to 40mph on Bellfarm Road. From a short distance after the junction with Brookside, there is a good quality, lit shared pedestrian/cycle route, largely separated from vehicular traffic to the north of the carriageway. Whilst there are uncontrolled crossings towards the High Street, cyclists would need to dismount.

Route C1d: Rocks Road/Rocks Park Road towards Bellfarm Road and High Street

3.7 The final route to the town centre considered for cyclists is via Rocks Road (and considered for route C1b) and then leading south through the residential area along Rocks Park Road and Scarletts Close. This route is approximately 1.8 kilometres in length.

3.8 There is a gentle gradient along Rocks Park Road, which descends along Scarletts Close towards an existing unlit alleyway, where cycling is prohibited. As such cyclists would need to dismount at this point. The alley connects to the existing shared foot/cyclepath to the north of Bellfarm Road. Whilst this route provides a good quality connection for cyclists, natural surveillance is only from the carriageway. The route continues east towards the town, and the end of route C1c described above.

Routes to Uckfield Railway Station (2)

3.9 Figure 3.2 illustrates the potential routes that could be taken by future residents to access Uckfield railway station. As with the walking routes, the cycling routes reflect those considered towards the town centre (C1 a to d), although also take into account the High Street from Church Street to the railway station. The commentary below therefore focuses on this section only. Reference should be made to the routes to the town centre considered above, which provide commentary on the quality of the remainder of the routes considered for cycling.

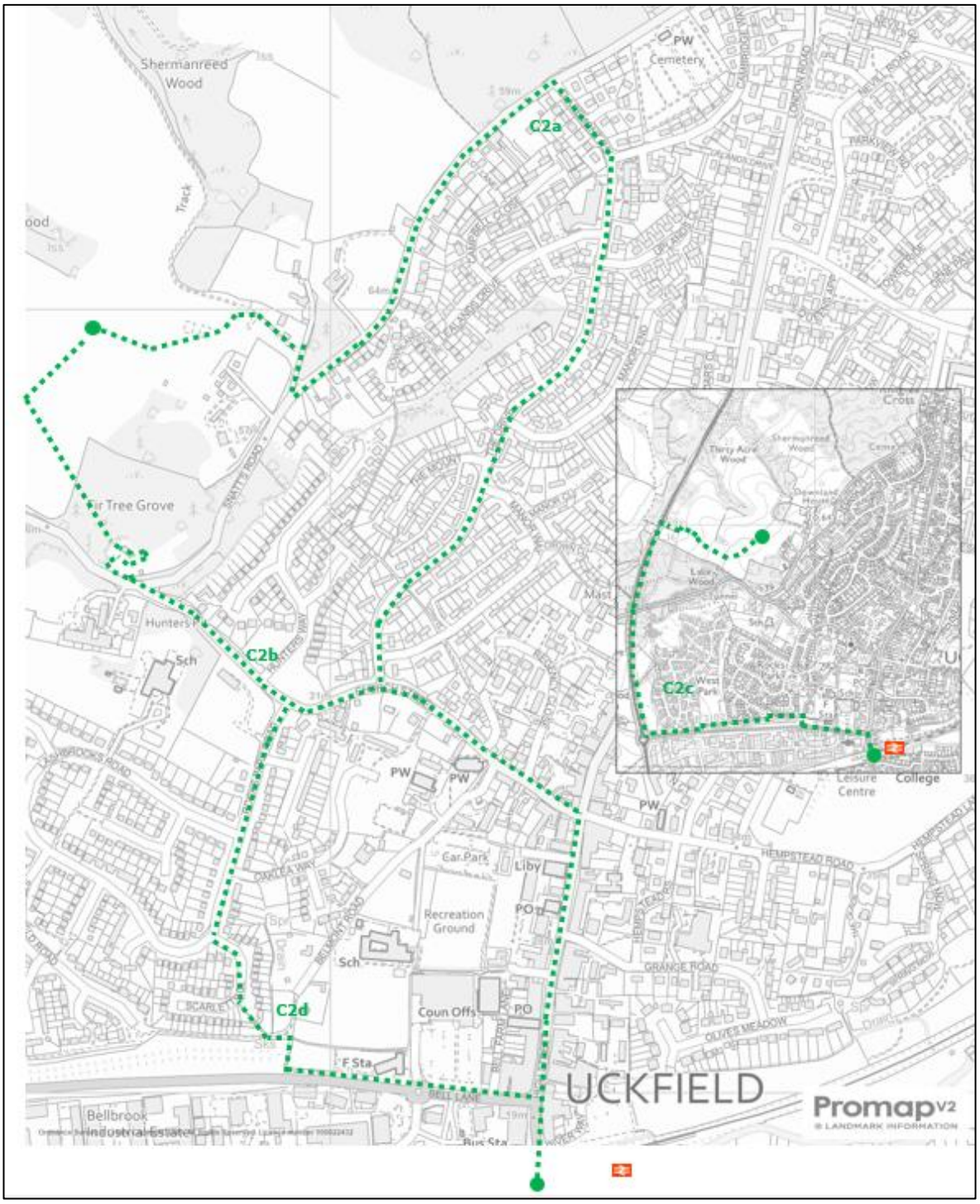


Figure 3.2: Routes to Uckfield Railway Station

3.10 The most direct routes are via Rocks Road/Church Street (C2b) and Rocks Road/Rocks Park Road (C2d), both at approximately 1.7 kilometres in length. However, it should be noted that cyclists would need to dismount for a section of the route via Rocks Park Road along an existing alleyway.

3.11 The High Street between Church Street and the railway station is a straight route with a downhill gradient towards the station, within the town centre 20mph zone. There are no dedicated cycle routes or crossings along this section and so cyclists would be on carriageway, where there are advance stop lines at the signalised junctions. The route has good natural surveillance and generally provides an attractive environment for cyclists.

Routes to Bellbrook Industrial Estate & Meads Medical Centre (C3)

3.12 Figure 3.3 illustrates the potential routes that could be taken by future residents to access Bellbrook Industrial Estate and Meads medical centre. These include the walking routes considered (W3) as well as an additional route via Belmont Road.

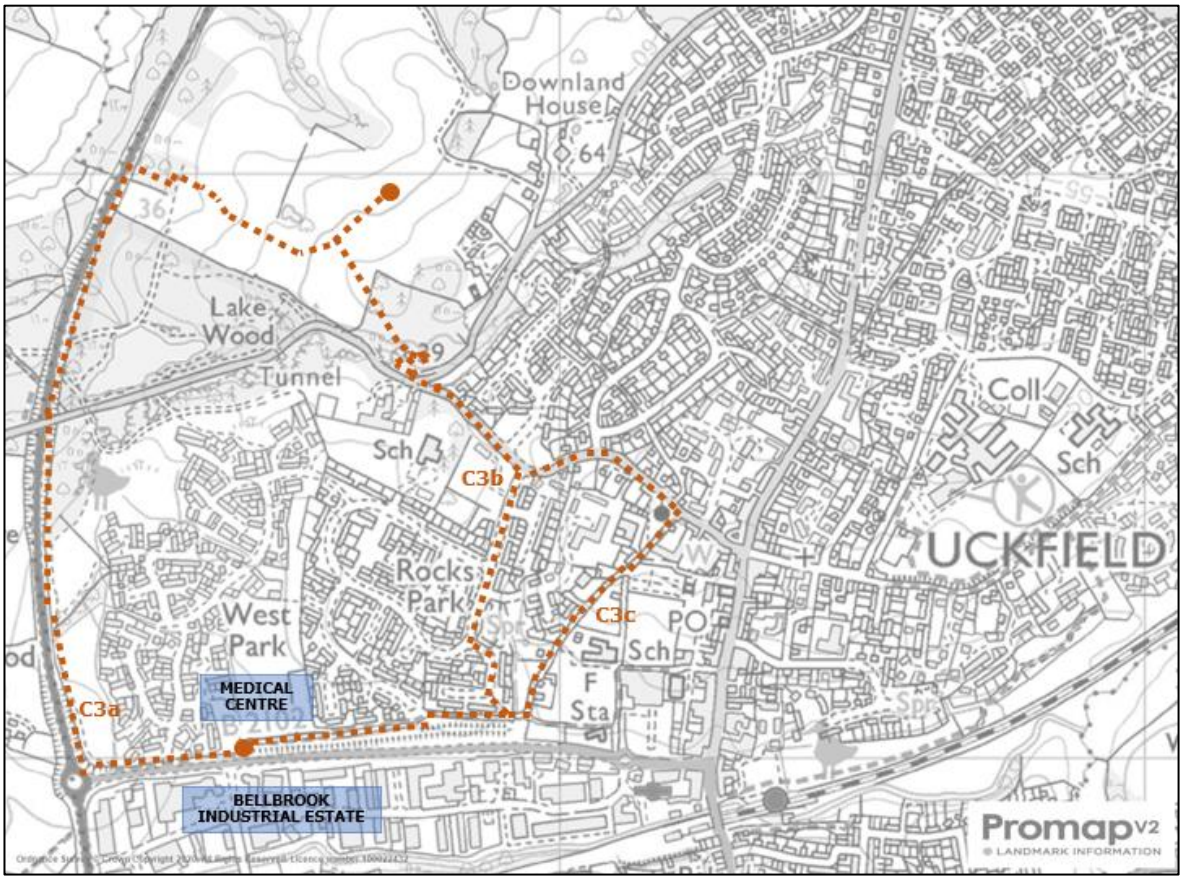


Figure 3.3: Routes to Bellbrook Industrial Estate & Meads Medical Centre

Route C3a: A22/Bellfarm Road

3.13 This route is circa 1.9 kilometres in length and uses the new site access down the A22, then turning into Bellfarm Road. As described for route C1c, there are no existing cycle routes along the A22 and initial section of Bellfarm Road and so cyclists would be on carriageway, which is 60mph along the A22, reducing to 40mph on Bellfarm Road. The A22 provides a bypass around Uckfield and so is subject to high traffic volumes. To access the industrial estate, cycles would use the existing carriageway to turn into Brookside/Bell Lane.

Route C3b: Rocks Road/Rocks Park Road towards Bellfarm Road

3.14 An alternative route follows that generally of C1d described above, using the residential roads to the south and alleyway (where cyclists would need to dismount) connecting to the existing foot/cycle path leading west. This route is approximately 1.6 kilometres in length.

3.15 From where the alleyway off Scarletts Close meets the existing foot/cycle path, the route benefits from a good width, is level, includes some lighting and is generally a pleasant environment, although there are some parts within limited natural surveillance. The foot/cycle path leads directly to the medical centre and the crossing described for route C3a would be used to access the industrial estate, following the natural desire line. This is an uncontrolled crossing and cyclists would again need to dismount.

Route C3c: Rocks Road/Church Street/Belmont Road/Bellfarm Road

3.16 A slightly longer route for cyclists, that avoids the need to dismount at the alley off Scarletts Close, is to follow route C1b towards the town and then turn south along Belmont Road. This then connect back to the shared pedestrian/cycle route leading west (as described for route C3b). This route is circa 1.9 kilometres in length. Whilst Belmont Road is generally flat, the route is narrow, unlit with limited natural surveillance.

Routes to Uckfield College & Leisure Centre (C4)

3.17 Figure 3.4 illustrates the potential routes that could be taken by future residents to access Uckfield college and leisure centre (as well as Manor Primary School).

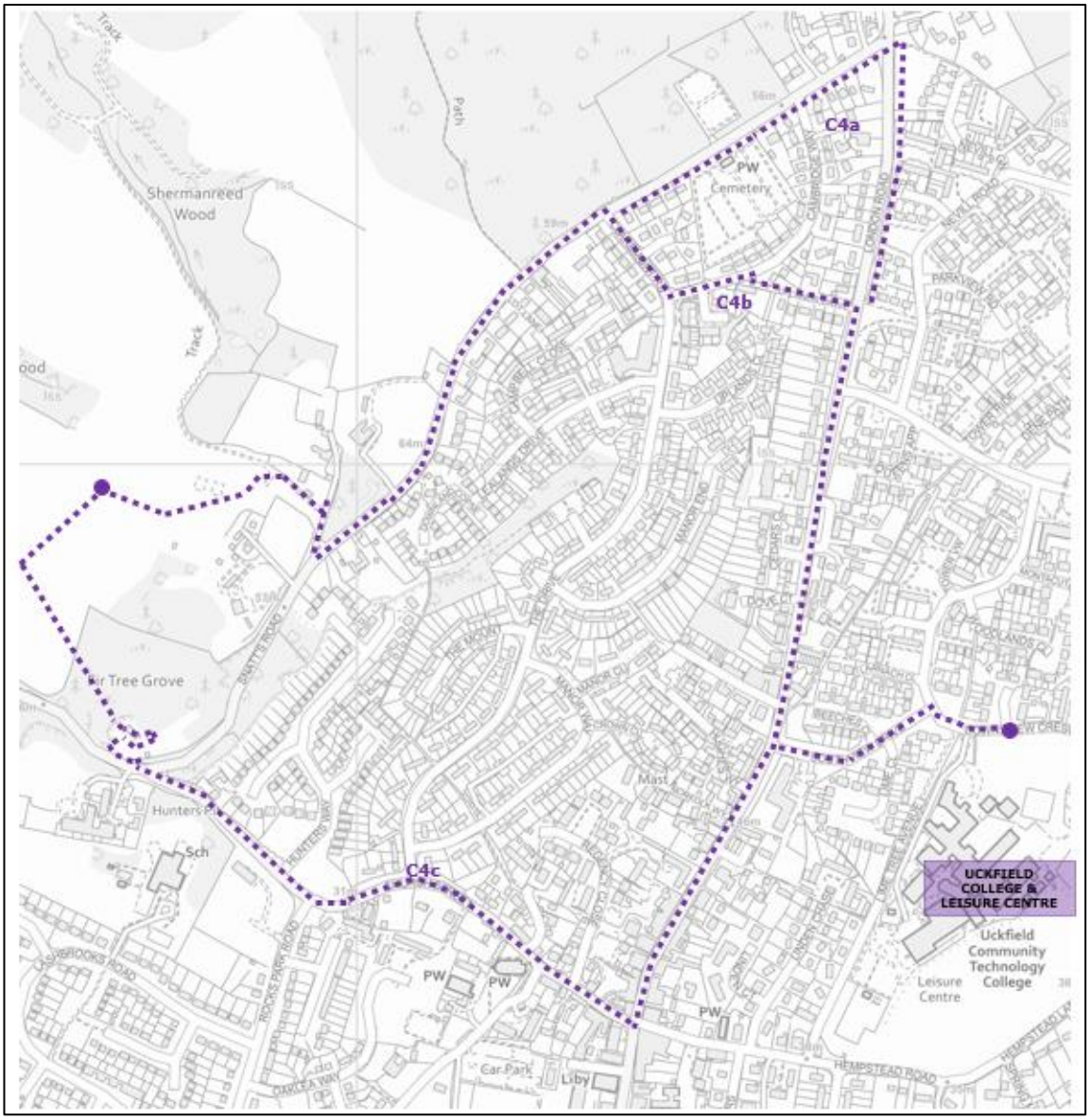


Figure 3.2: Routes to Uckfield College & Leisure Centre

Route C4a: Snatts Road via London Road to Southview Drive and Downsview Crescent

3.18 The longest route (approximately 2.4 kilometres) is using existing roads, including Snatts Road, London Road and then the residential roads of Southview Drive and Downlands Crescent, and as such is shared with vehicular traffic. The route is generally lit and has good natural surveillance, with a gentle gradient.

Route C4b: Snatts Road via Claremont Rise to London Road and Southview Drive

3.19 A slightly shorter version of route C4a, is to cut along the residential roads of Claremont Rise, Cambridge Way and Uplands Drive, which by their nature have a lower volume and likely slower speed of traffic. This route is circa 2 kilometres in length.

3.20 The route is generally overlooked and lit (with the exception of Uplands Drive). There is a significant gradient on Claremont Rise but the route levels out along Cambridge Rise, which connects to Uplands Drive via a short footpath. Uplands Drive operates as a shared surface and generally provides a good quality route to London Road. The carriageway on London Road and the into the residential roads of Southview Drive and Downsview Crescent would then be used by cyclists to access the school and leisure centre.

Route C4c: Rocks Road/Church Street to High Street and up to Southview Drive

3.21 The most direct route to Uckfield college and leisure centre is via the route described to the town centre (C1b) along Rocks Road and Church Street. Cyclists would then travel up the High Street and turn into Southview Drive and onto Downsview Crescent. This route is approximately 1.8 kilometres in length.

The High Street between Church Street and Southview Drive gently climbs moving from the 20mph zone to the 30mph section of the road. The High Street includes active frontages and so there is a good level of natural surveillance.

4.0 Recommended Issues to Address

4.1 The walking and cycling audits presented in the previous two sections have identified a number of key issues that are recommended to be addressed to deliver suitable pedestrian and cycle links between the site and core destinations. The main issues identified within the audit include:

- Gaps and narrow sections of footway along existing pedestrian and/or cycle routes between the site and the town, railway station and industrial estate;
- Poor, or no crossing provision on desire lines between the site and core destinations that are suitable for intended user groups;
- Short sections of existing routes with steep gradients, overgrown paths and unmade surfacing; and
- Poor pedestrian and cycle priority on the approaches to the town.

4.2 It is recommended that enhancement works to address these key issues should include:

- Provision of new pedestrian and/or cycle infrastructure to connect the site to existing networks (e.g. along Rocks Road, Snatts Road and the proposed vehicular access off the A22) where there is no existing provision;
- Installation of appropriate crossing facilities for pedestrians and/or cyclists on Rocks Road (to aid connections to the town, railway station, and industrial estate), Snatts Road (to link to existing footways/paths), London Road (to assist movements towards Uckfield college and leisure centre) and Bellfarm Road (to enhance provision to the industrial estate).
- Replacement of existing steps at the end of Downland Copse (along footpath 3a) and surfacing of public footpath between steps and Hunters Way;

- Widening existing pedestrian/cycle routes where currently not suitable for intended user groups (e.g. along sections of Rocks Road, Church Street, and the existing foot/cycle path along Bellfarm Road);
- Installing measures to reduce vehicle speeds on the approach to the town and enhance pedestrian and cycle priority at junctions;
- Installation of suitable signage along existing public footpaths to core destinations; and
- Ensuring appropriate lighting of any new connections/routes.

4.3 The key issues to be addressed focus on enhancing the most direct and common routes between the site and the identified core destinations. It is important to note that there may be a several design solutions to address the identified points.

NMU Appendix A

Scoring Categories

Scoring Categories

Desire lines/Directness	Description Does the route follow a natural desire line and offer a direct and legible route?	1 Indirect - conveluted route	2	3 Satisfactory	4 Fairly direct - generally follows desire line	5 Direct - follows natural desire line
Width	Is the width of the route suitable for the intended use and all users? Is the route free from obstruction (e.g. parked vehicles, overgrown vegetation, street signs/clutter etc)?	1 Narrow or path non-existant	2 Less than satisfactory for context	3 Satisfactory for context	4 More than satisfactory for context	5 Excellent
Gradient	Is the gradient of the route suitable for the intended use and all users? Is the route step-free?	1 Steep	2 Generally sloping gradient	3 Mixed	4 Generally flat gradient	5 Flat
Lighting	Is the route lit? Is the quality of the lighting effective and appropriate?	1 No lighting	2 Sparse/ineffective lighting	3 Lit	4 Generally regular/effective lighting	5 Good lighting
Personal security/natural surveillance	Is the route open and overlooked?	1 No natural surveillance	2 Only short sections of surveillance	3 Mixed	4 Only short sections with no surveillance	5 Good natural surveillance
Attractiveness/Environment	Does the quality of the route make it attractive for the intended use and all users? Consider vehicle numbers/speeds/separation from vehicles/other users (e.g. cycling on pavements), whether the route is well maintained etc	1 Unattractive	2	3 Neither	4	5 Attractive
Crossing Provision	If crossings are required, are facilities available that are suitable for the intended use and all users and are these located on desire lines?	1 No crossing provision	2 Poor crossing provision, or unsuitable for most users	3 Crossing provided	4 Crossings available, maybe not suitable for all users or slightlly off desire lines	5 Appropriate crossings for all users on desire lines, where necessary (or no crossing required)

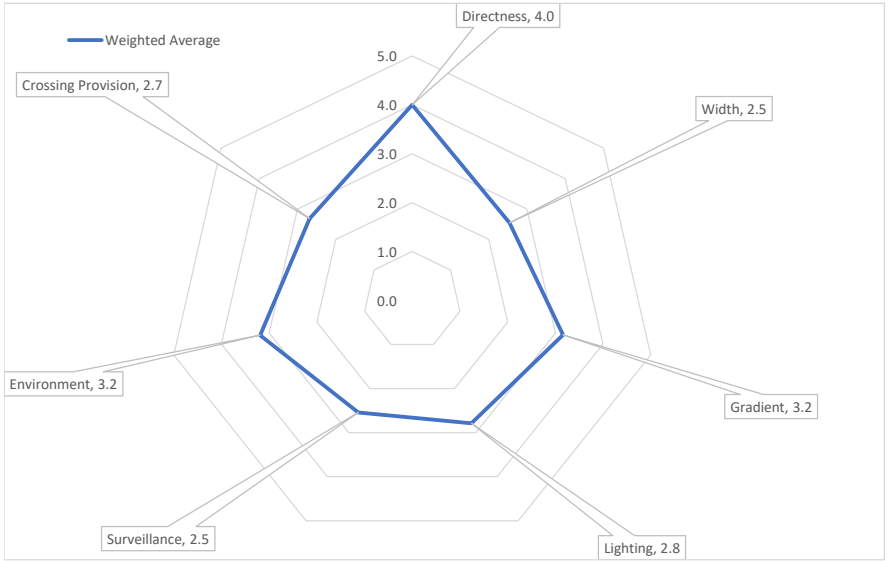
NMU Appendix B

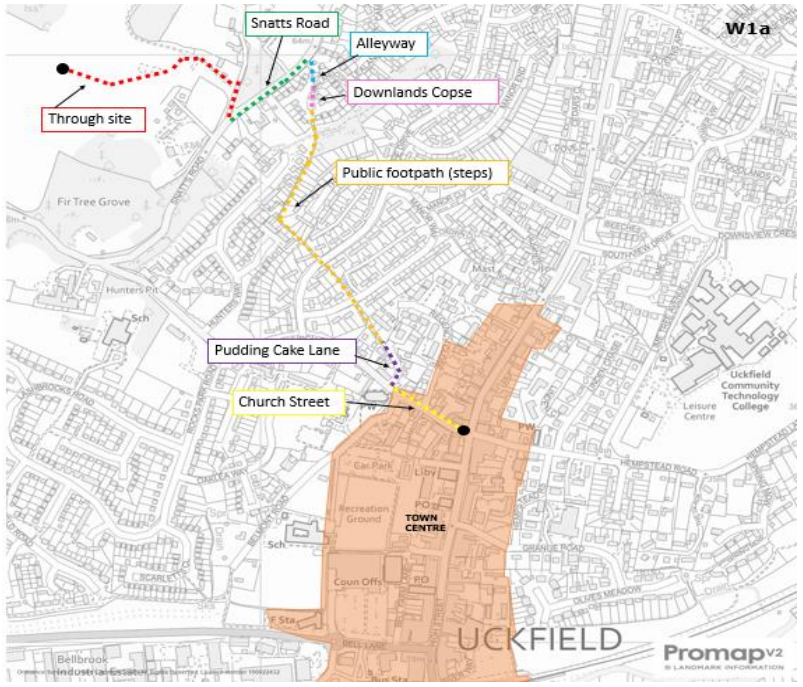
Walking Audit

1: To Town Centre

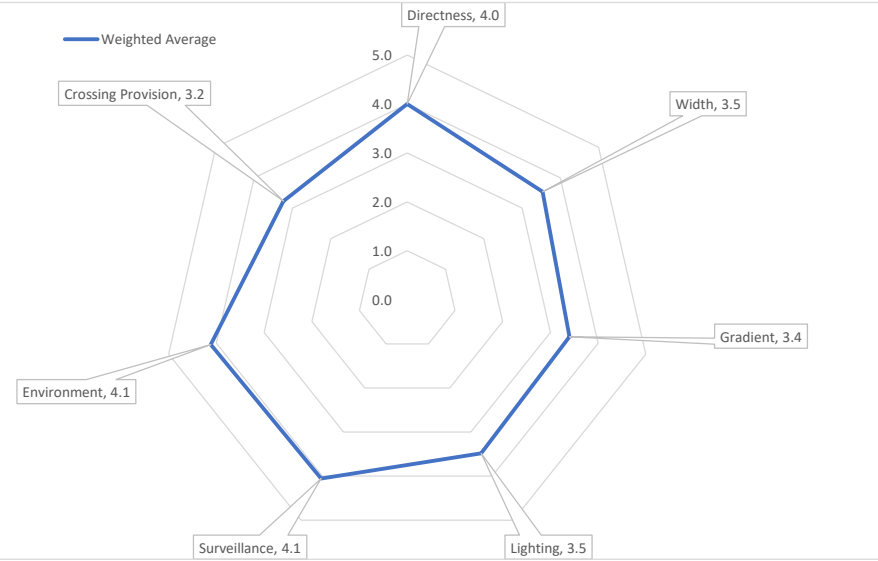
Option	Route	Distance (km)
a	Snatts Road/public footpath (via steps)/Pudding Cake Lane/Church Street/High Street	1.30
b	Snatts Road/public footpath (via steps)/Hunters Way/Church Street/High Street	1.45
c	Rocks Road/Church Street/High Street	1.09
d	A22/Bellfarm Road/B2102/High Street	2.71
e	Rocks Road/Rocks Park Road/Scarletts Close/Bellfarm Road	1.67

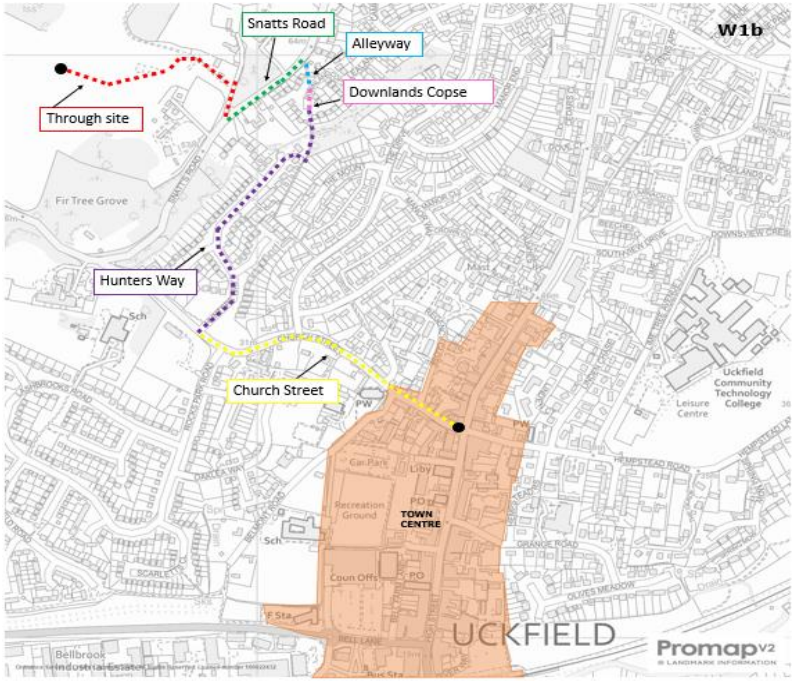
Route Option			**Directness**		**Width**		**Gradient**		**Lighting**		**Surveillance**		**Environment**		**Crossing Provision**		**Overall Score**	
a	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	4	1.1	5	1.4	4	1.1	5	1.4	3	0.8	4	1.1	5	1.35	4.3	1.2
	Snatts Road	170	4	0.5	1	0.1	4	0.5	1	0.1	2	0.3	3	0.4	1	0.13	2.3	0.3
	Alleyway	40	4	0.1	3	0.1	3	0.1	1	0.0	1	0.0	2	0.1	5	0.15	2.7	0.1
	Downlands Copse	60	4	0.2	4	0.2	4	0.2	4	0.2	5	0.2	5	0.2	5	0.23	4.4	0.2
	Public footpath (steps)	430	4	1.3	1	0.3	1	0.3	1	0.3	1	0.3	2	0.7	1	0.33	1.6	0.5
	Pudding Cake Lane	95	4	0.3	3	0.2	5	0.4	4	0.3	4	0.3	4	0.3	5	0.37	4.1	0.3
	Church Street	150	4	0.5	2	0.2	5	0.6	4	0.5	5	0.6	4	0.5	1	0.12	3.6	0.4
	TOTAL	**1295**		**4.0**		**2.5**		**3.2**		**2.8**		**2.5**		**3.2**		**2.68**		**3.0**



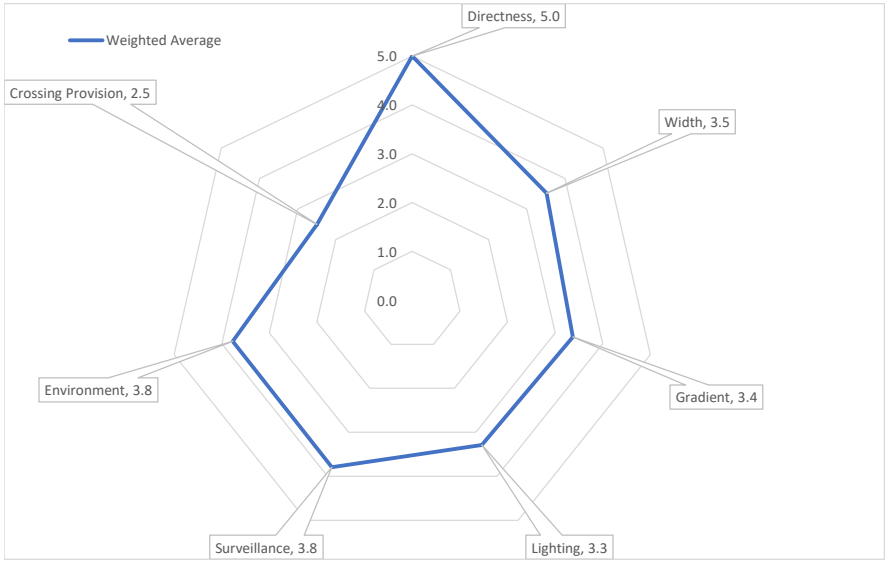


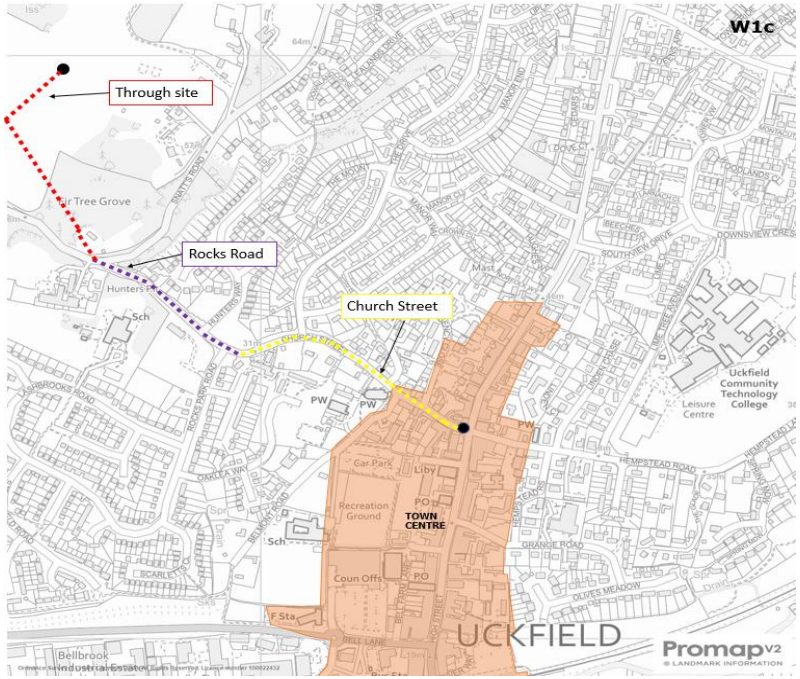
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
b	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	4	1.0	5	1.2	4	1.0	5	1.2	3	0.7	4	1.0	5	1.2	4.3	1.0
	Snatts Road	170	4	0.5	1	0.1	4	0.5	1	0.1	2	0.2	3	0.4	1	0.1	2.3	0.3
	Alleyway	40	4	0.1	3	0.1	3	0.1	1	0.0	1	0.0	2	0.1	5	0.1	2.7	0.1
	Downlands Copse	60	4	0.2	4	0.2	4	0.2	4	0.2	5	0.2	5	0.2	5	0.2	4.4	0.2
	Hunters Way	360	4	1.0	4	1.0	3	0.7	4	1.0	5	1.2	5	1.2	5	1.2	4.3	1.1
	Church Street	470	4	1.3	3	1.0	3	1.0	3	1.0	5	1.6	4	1.3	1	0.3	3.3	1.1
	TOTAL	**1450**		**4.0**		**3.5**		**3.4**		**3.5**		**4.1**		**4.1**		**3.2**		**3.7**



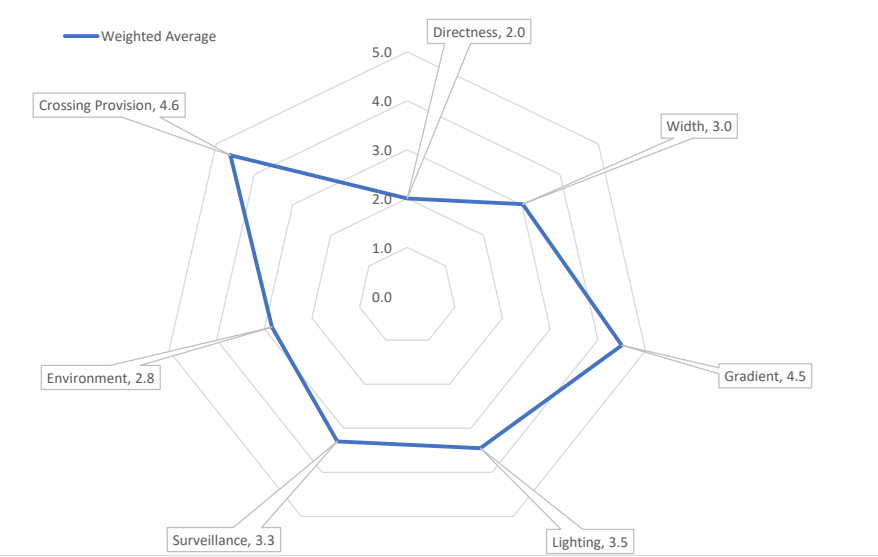


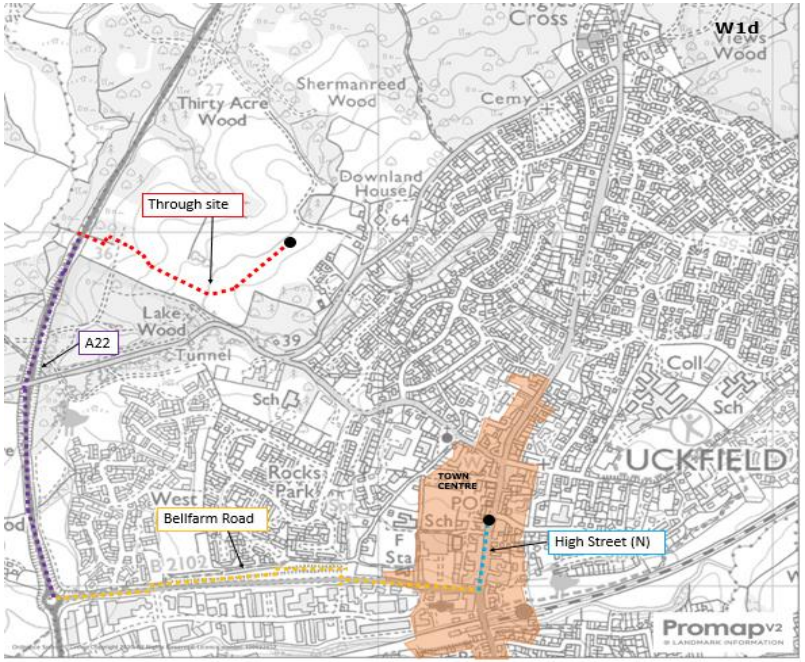
Route Option		Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
c Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
Through site	405	5	1.9	5	1.9	4	1.5	5	1.9	3	1.1	4	1.5	5	1.9	4.4	1.7
Rocks Road	250	5	1.2	2	0.5	3	0.7	1	0.2	3	0.7	3	0.7	1	0.2	2.6	0.6
Church Street	430	5	2.0	3	1.2	3	1.2	3	1.2	5	2.0	4	1.6	1	0.4	3.4	1.4
TOTAL	**1085**		**5.0**		**3.5**		**3.4**		**3.3**		**3.8**		**3.8**		**2.5**		**3.6**



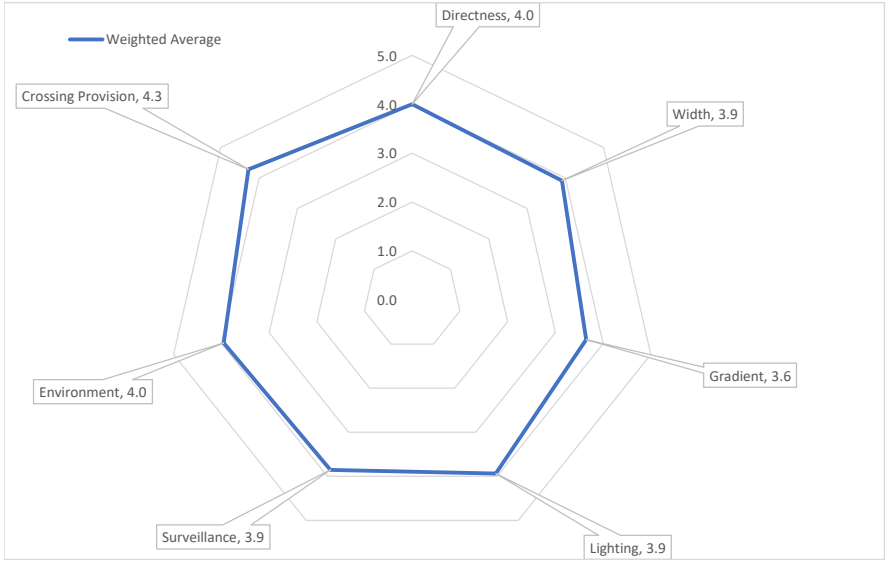


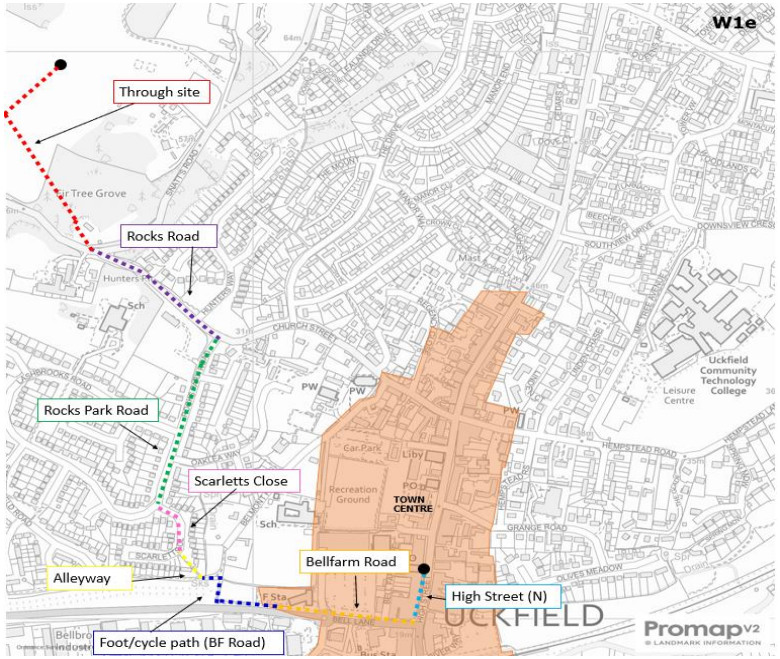
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
d	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	2	0.4	5	0.9	5	0.9	5	0.9	4	0.7	4	0.7	5	0.9	4.3	0.8
	A22	1050	2	0.8	1	0.4	4	1.5	1	0.4	3	1.2	1	0.4	5	1.9	2.4	0.9
	Bellfarm Road	1010	2	0.7	4	1.5	5	1.9	5	1.9	3	1.1	4	1.5	4	1.5	3.9	1.4
	High Street (N)	150	2	0.1	4	0.2	3	0.2	5	0.3	5	0.3	4	0.2	5	0.3	4.0	0.2
	TOTAL	**2710**		**2.0**		**3.0**		**4.5**		**3.5**		**3.3**		**2.8**		**4.6**		**3.4**





Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
e	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	405	4	1.0	5	1.2	4	1.0	5	1.2	3	0.7	4	1.0	5	1.2	4.3	1.0
	Rocks Road	250	4	0.6	2	0.3	3	0.5	1	0.2	3	0.5	3	0.5	1	0.2	2.4	0.4
	Rocks Park Road	305	4	0.7	4	0.7	3	0.5	4	0.7	5	0.9	5	0.9	5	0.9	4.3	0.8
	Scarlett Close	110	4	0.3	4	0.3	2	0.1	4	0.3	5	0.3	5	0.3	5	0.3	4.1	0.3
	Alleyway	55	4	0.1	3	0.1	3	0.1	2	0.1	1	0.0	3	0.1	5	0.2	3.0	0.1
	Foot/cyclepath (BF Rd)	190	4	0.5	4	0.5	5	0.6	4	0.5	3	0.3	3	0.3	5	0.6	4.0	0.5
	Bellfarm Road	200	4	0.5	4	0.5	5	0.6	5	0.6	5	0.6	4	0.5	4	0.5	4.4	0.5
	High Street (N)	150	4	0.4	4	0.4	3	0.3	5	0.5	5	0.5	4	0.4	5	0.5	4.3	0.4
	TOTAL	**1665**		**4.0**		**3.9**		**3.6**		**3.9**		**3.9**		**4.0**		**4.3**		**3.9**

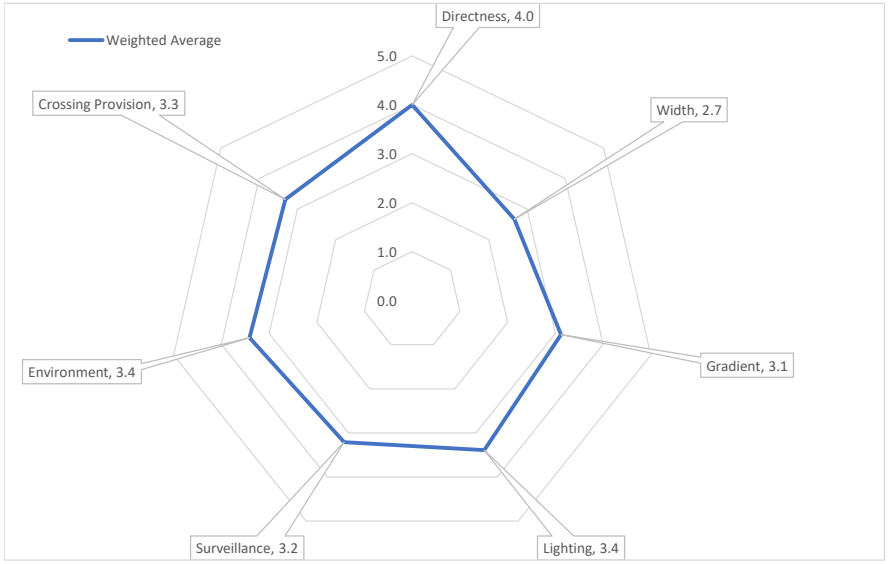


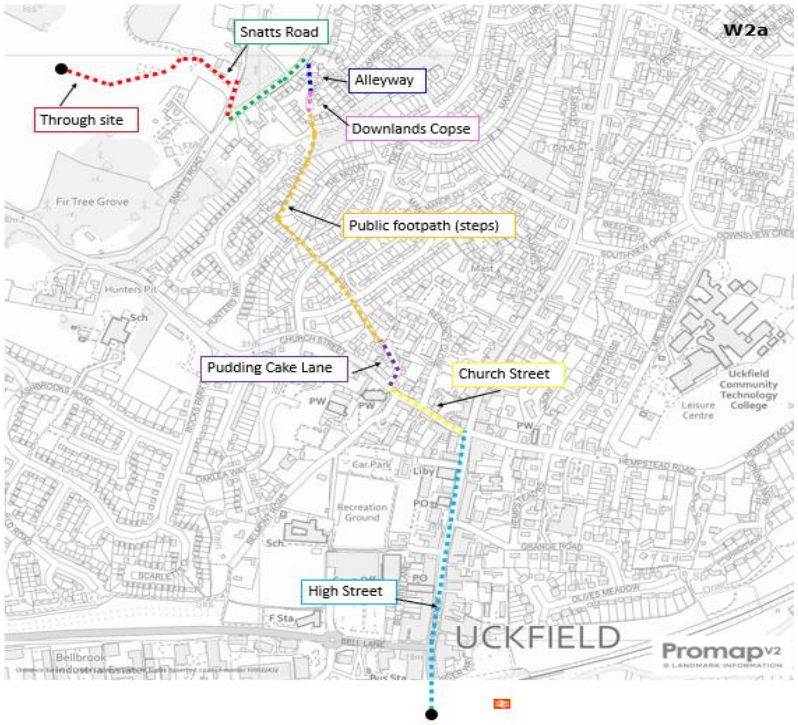


2: To Railway Station

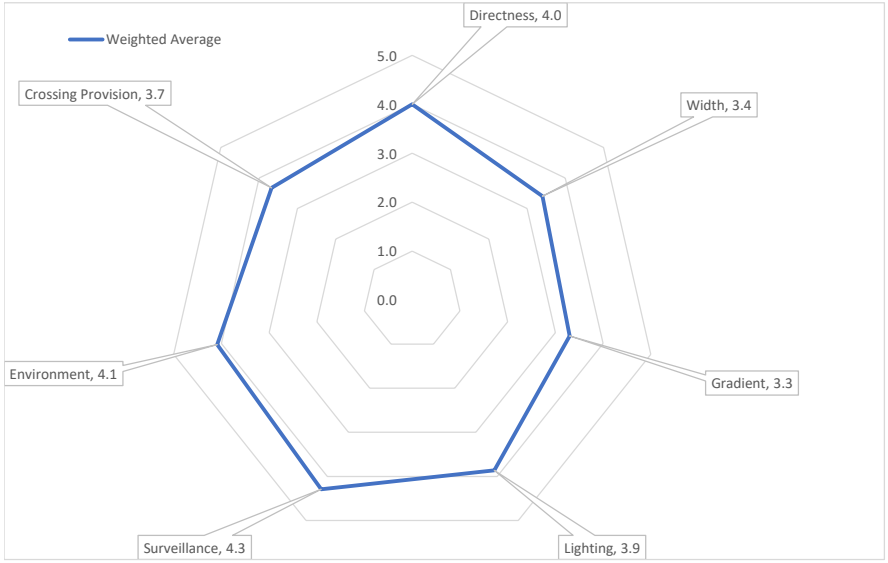
Option	Route	Distance (km)
a	Snatts Road/public footpath (via steps)/Pudding Cake Lane/Church Street/High Street/B2102	1.78
b	Snatts Road/public footpath (via steps)/Hunters Way/Church Street/High Street/B2102	1.94
c	Rocks Road/Church Street/High Street/B2102	1.57
d	A22/Bellfarm Road/B2102/High Street/B2102	2.66
e	Rocks Road/Rocks Park Road/Scarletts Close/Bellfarm Road	1.62

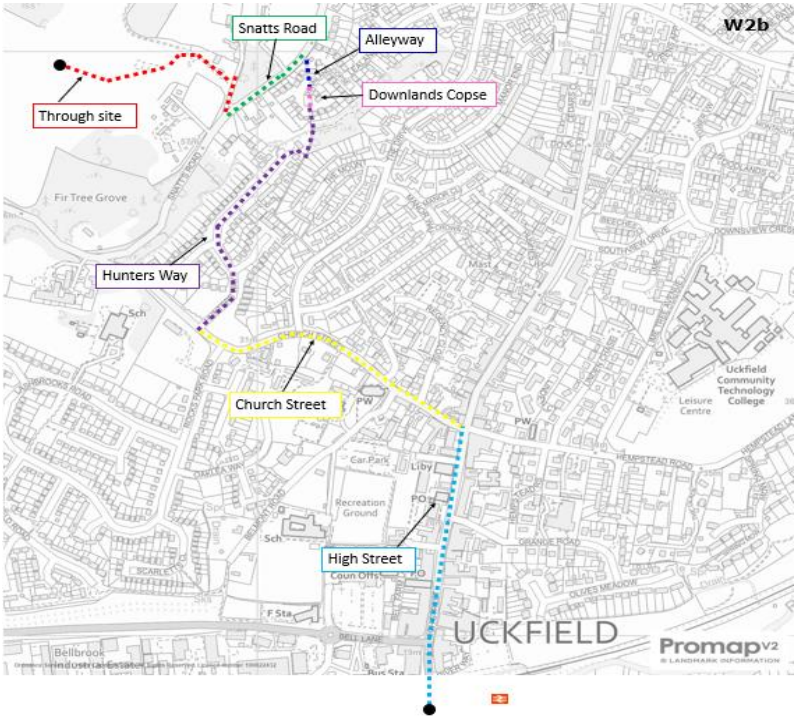
Route Option			**Directness**		**Width**		**Gradient**		**Lighting**		**Surveillance**		**Environment**		**Crossing Provision**		**Overall Score**	
a	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	4	0.8	5	1.0	4	0.8	5	1.0	3	0.6	4	0.8	5	1.0	4.3	0.8
	Snatts Road	170	4	0.4	1	0.1	4	0.4	1	0.1	2	0.2	3	0.3	1	0.1	2.3	0.2
	Alleyway	40	4	0.1	3	0.1	3	0.1	1	0.0	1	0.0	2	0.0	5	0.1	2.7	0.1
	Downlands Copse	60	4	0.1	4	0.1	4	0.1	4	0.1	5	0.2	5	0.2	5	0.2	4.4	0.1
	Public footpath (steps)	430	4	1.0	1	0.2	1	0.2	1	0.2	1	0.2	2	0.5	1	0.2	1.6	0.4
	Pudding Cake Lane	95	4	0.2	3	0.2	5	0.3	4	0.2	4	0.2	4	0.2	5	0.3	4.1	0.2
	Church Street	150	4	0.3	2	0.2	5	0.4	4	0.3	5	0.4	4	0.3	1	0.1	3.6	0.3
	High Street	485	4	1.1	3	0.8	3	0.8	5	1.4	5	1.4	4	1.1	5	1.4	4.1	1.1
	TOTAL	**1780**		**4.0**		**2.7**		**3.1**		**3.4**		**3.2**		**3.4**		**3.3**		**3.3**



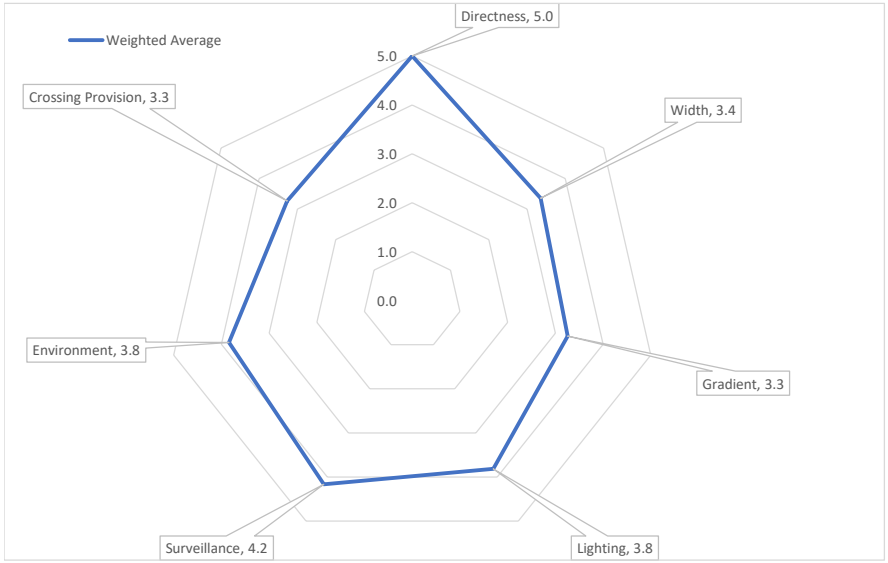


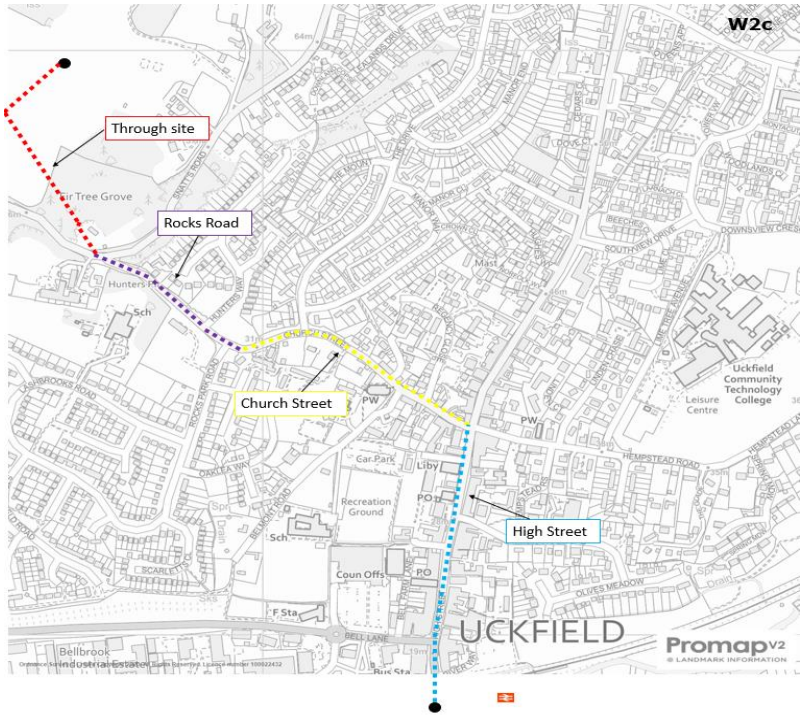
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
b	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	4	0.7	5	0.9	4	0.7	5	0.9	3	0.5	4	0.7	5	0.9	4.3	0.8
	Snatts Road	170	4	0.4	1	0.1	4	0.4	1	0.1	2	0.2	3	0.3	1	0.1	2.3	0.2
	Alleyway	40	4	0.1	3	0.1	3	0.1	1	0.0	1	0.0	2	0.0	5	0.1	2.7	0.1
	Downlands Copse	60	4	0.1	4	0.1	4	0.1	4	0.1	5	0.2	5	0.2	5	0.2	4.4	0.1
	Hunters Way	360	4	0.7	4	0.7	3	0.6	4	0.7	5	0.9	5	0.9	5	0.9	4.3	0.8
	Church Street	470	4	1.0	3	0.7	3	0.7	3	0.7	5	1.2	4	1.0	1	0.2	3.3	0.8
	High Street	485	4	1.0	3	0.8	3	0.8	5	1.3	5	1.3	4	1.0	5	1.3	4.1	1.0
	TOTAL	**1935**		**4.0**		**3.4**		**3.3**		**3.9**		**4.3**		**4.1**		**3.7**		**3.8**



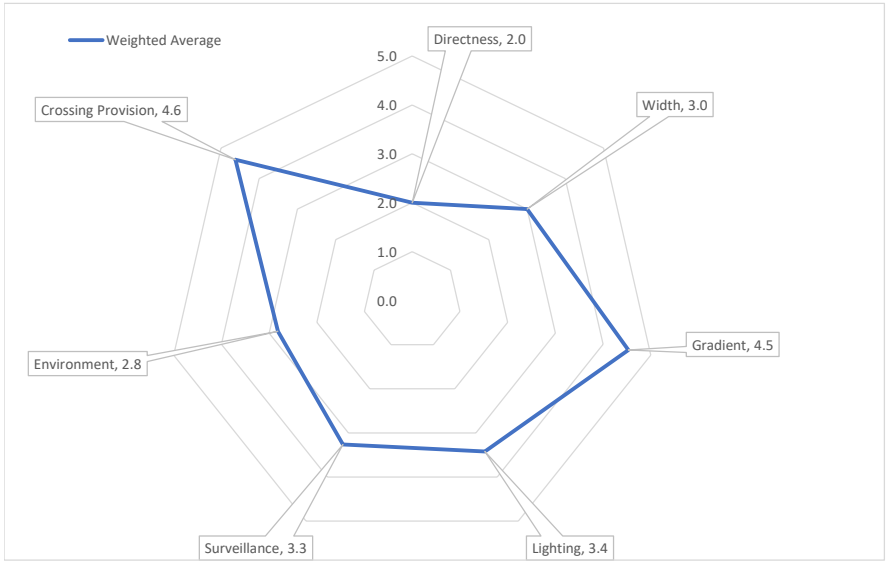


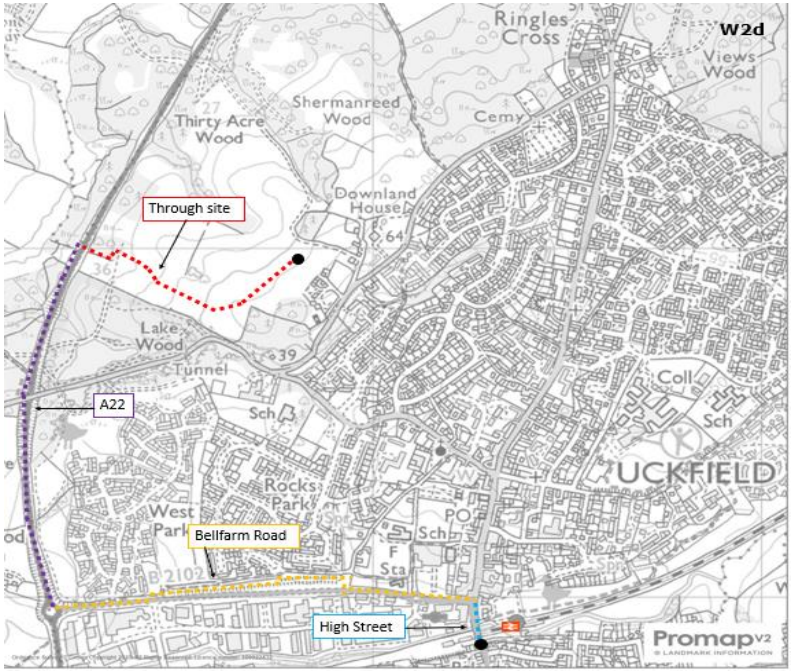
Route Option		Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
c Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
Through site	405	5	1.3	5	1.3	4	1.0	5	1.3	3	0.8	4	1.0	5	1.3	4.4	1.1
Rocks Road	250	5	0.8	2	0.3	3	0.5	1	0.2	3	0.5	3	0.5	1	0.2	2.6	0.4
Church Street	430	5	1.4	3	0.8	3	0.8	3	0.8	5	1.4	4	1.1	1	0.3	3.4	0.9
High Street	485	5	1.5	3	0.9	3	0.9	5	1.5	5	1.5	4	1.2	5	1.5	4.3	1.3
TOTAL	**1570**		**5.0**		**3.4**		**3.3**		**3.8**		**4.2**		**3.8**		**3.3**		**3.8**



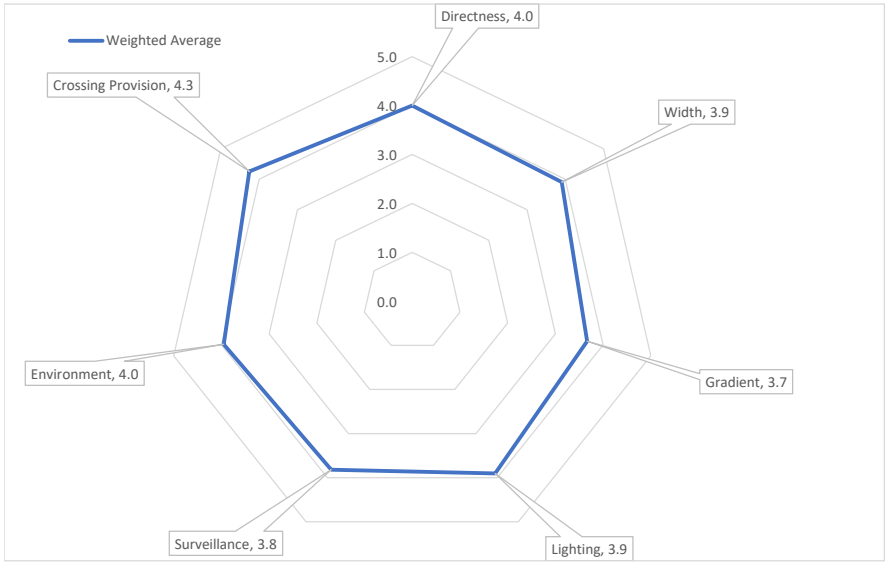


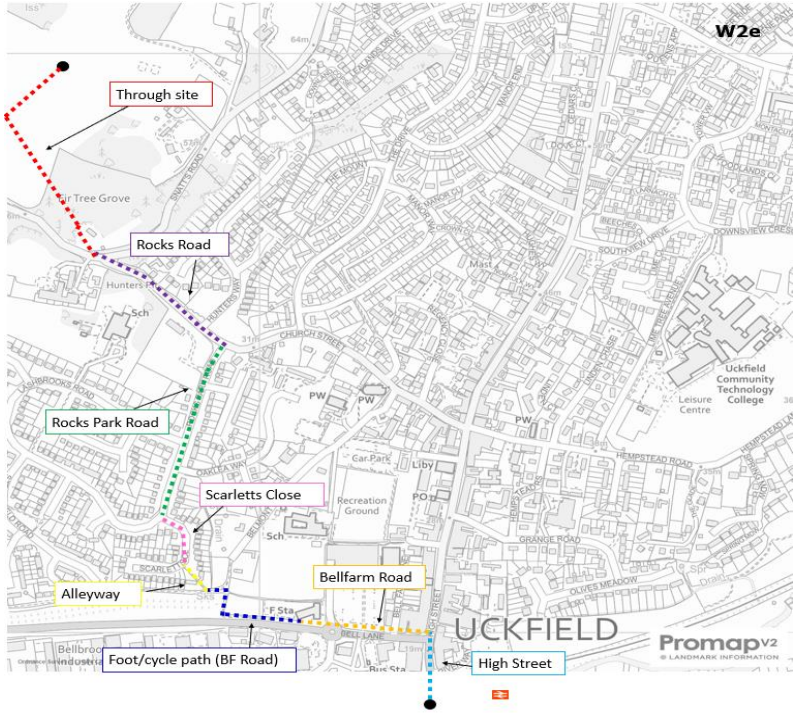
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
d	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	2	0.4	5	0.9	5	0.9	5	0.9	4	0.8	4	0.8	5	0.9	4.3	0.8
	A22	1050	2	0.8	1	0.4	4	1.6	1	0.4	3	1.2	1	0.4	5	2.0	2.4	1.0
	Bellfarm Road	1010	2	0.8	4	1.5	5	1.9	5	1.9	3	1.1	4	1.5	4	1.5	3.9	1.5
	High Street	100	2	0.1	4	0.2	3	0.1	5	0.2	5	0.2	4	0.2	5	0.2	4.0	0.2
	TOTAL	**2660**		**2.0**		**3.0**		**4.5**		**3.4**		**3.3**		**2.8**		**4.6**		**3.4**





Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
e	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	405	4	1.0	5	1.3	4	1.0	5	1.3	3	0.8	4	1.0	5	1.3	4.3	1.1
	Rocks Road	250	4	0.6	2	0.3	3	0.5	1	0.2	3	0.5	3	0.5	1	0.2	2.4	0.4
	Rocks Park Road	305	4	0.8	4	0.8	3	0.6	4	0.8	5	0.9	5	0.9	5	0.9	4.3	0.8
	Scarlett Close	110	4	0.3	4	0.3	2	0.1	4	0.3	5	0.3	5	0.3	5	0.3	4.1	0.3
	Alleyway	55	4	0.1	3	0.1	3	0.1	2	0.1	1	0.0	3	0.1	5	0.2	3.0	0.1
	Foot/cycleparth (BF Rd)	190	4	0.5	4	0.5	5	0.6	4	0.5	3	0.4	3	0.4	5	0.6	4.0	0.5
	Bellfarm Road	200	4	0.5	4	0.5	5	0.6	5	0.6	5	0.6	4	0.5	4	0.5	4.4	0.5
	High Street	100	4	0.2	4	0.2	3	0.2	5	0.3	5	0.3	4	0.2	5	0.3	4.3	0.3
	TOTAL	**1615**		**4.0**		**3.9**		**3.7**		**3.9**		**3.8**		**4.0**		**4.3**		**3.9**

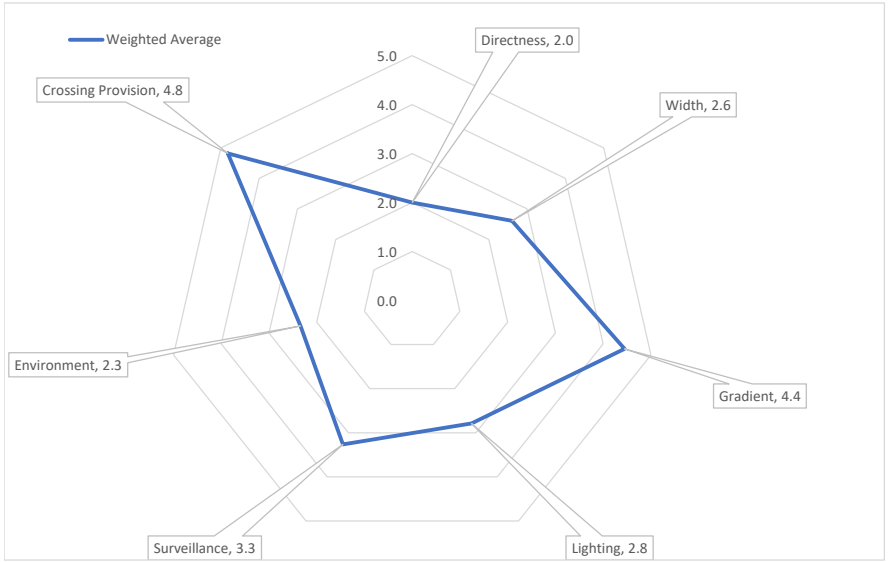


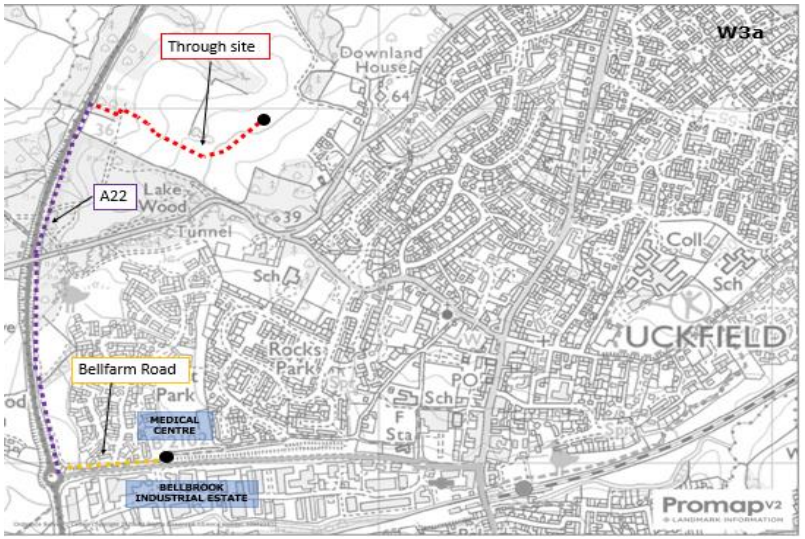


3: To Bellbrook Industrial Estate & Medical Centre

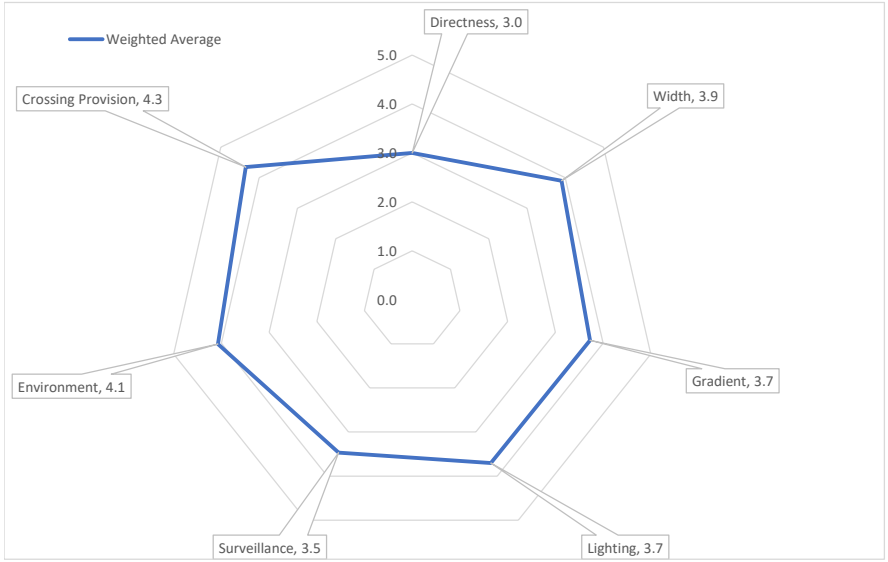
Option	Route	Distance (km)
a	A22/Bellfarm Road	1.90
b	Rocks Road/Rocks Park Road/Scarletts Close/Bellfarm Road	1.54

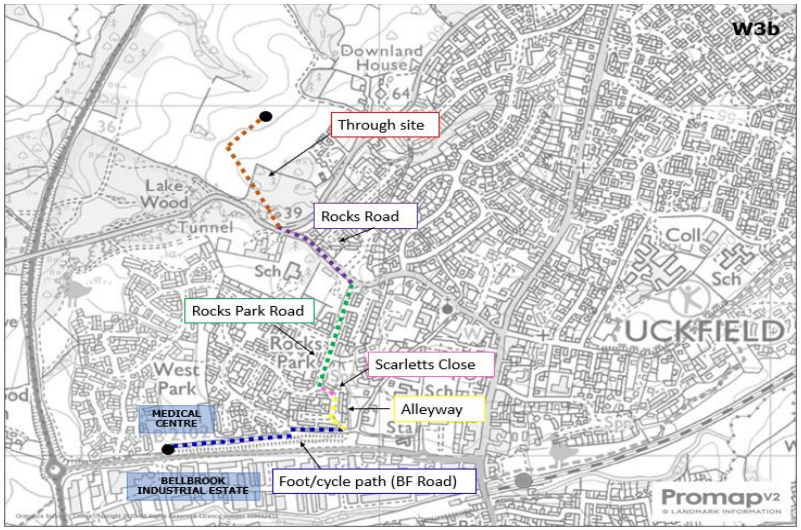
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
a	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	2	0.5	5	1.3	5	1.3	5	1.3	4	1.1	4	1.1	5	1.3	4.3	1.1
	A22	1050	2	1.1	1	0.6	4	2.2	1	0.6	3	1.7	1	0.6	5	2.8	2.4	1.3
	Bellfarm Road	350	2	0.4	4	0.7	5	0.9	5	0.9	3	0.6	4	0.7	4	0.7	3.9	0.7
	TOTAL	**1900**		**2.0**		**2.6**		**4.4**		**2.8**		**3.3**		**2.3**		**4.8**		**3.2**





Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
b	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	405	3	0.8	5	1.3	4	1.1	5	1.3	3	0.8	4	1.1	5	1.3	4.1	1.1
	Rocks Road	250	3	0.5	2	0.3	3	0.5	1	0.2	3	0.5	3	0.5	1	0.2	2.3	0.4
	Rocks Park Road	305	3	0.6	4	0.8	3	0.6	4	0.8	5	1.0	5	1.0	5	1.0	4.1	0.8
	Scarlett Close	110	3	0.2	4	0.3	2	0.1	4	0.3	5	0.4	5	0.4	5	0.4	4.0	0.3
	Alleyway	55	3	0.1	3	0.1	3	0.1	2	0.1	1	0.0	3	0.1	5	0.2	2.9	0.1
	Foot/cyclepath (BF Rd)	410	3	0.8	4	1.1	5	1.3	4	1.1	3	0.8	4	1.1	5	1.3	4.0	1.1
	TOTAL	**1535**		**3.0**		**3.9**		**3.7**		**3.7**		**3.5**		**4.1**		**4.3**		**3.7**

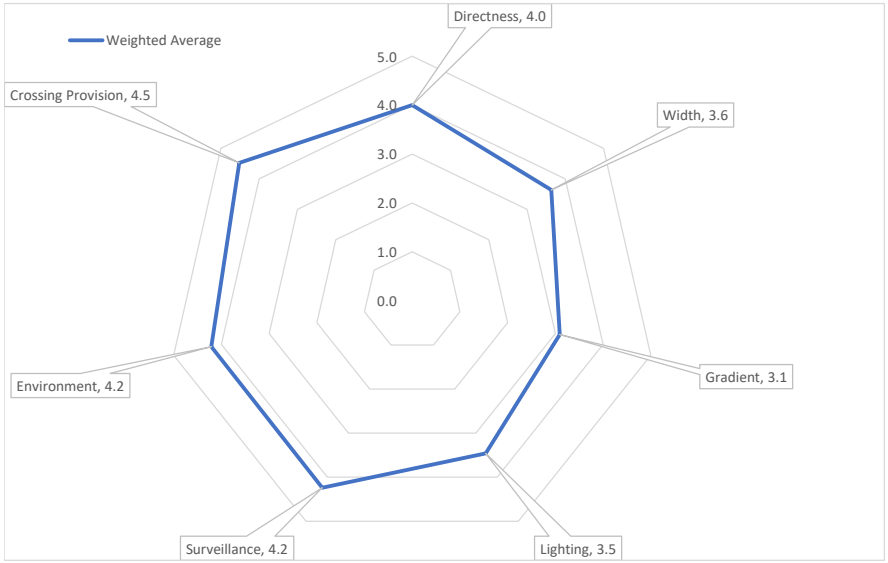


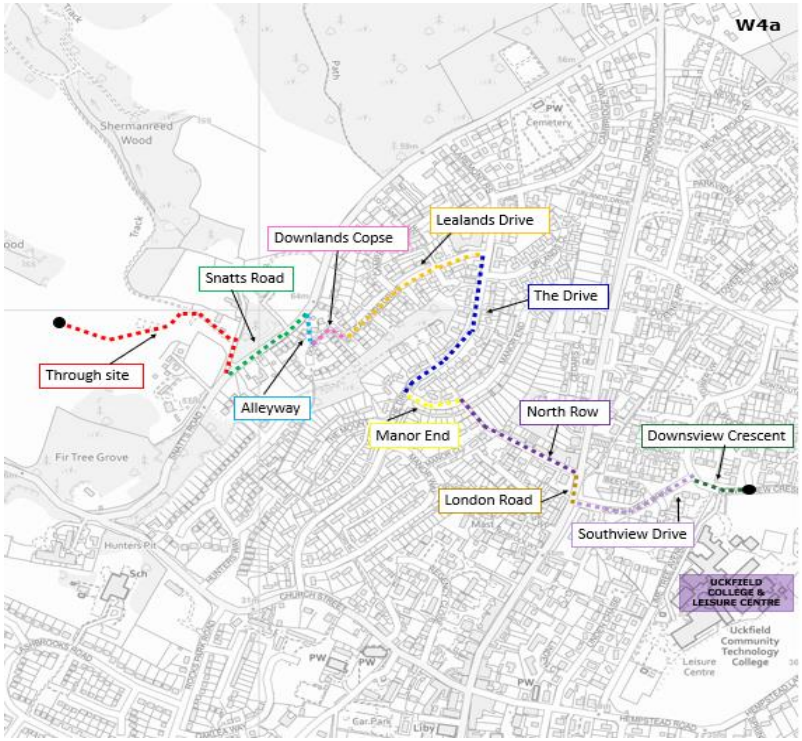


4: To Uckfield College, Leisure Centre & Manor Primary

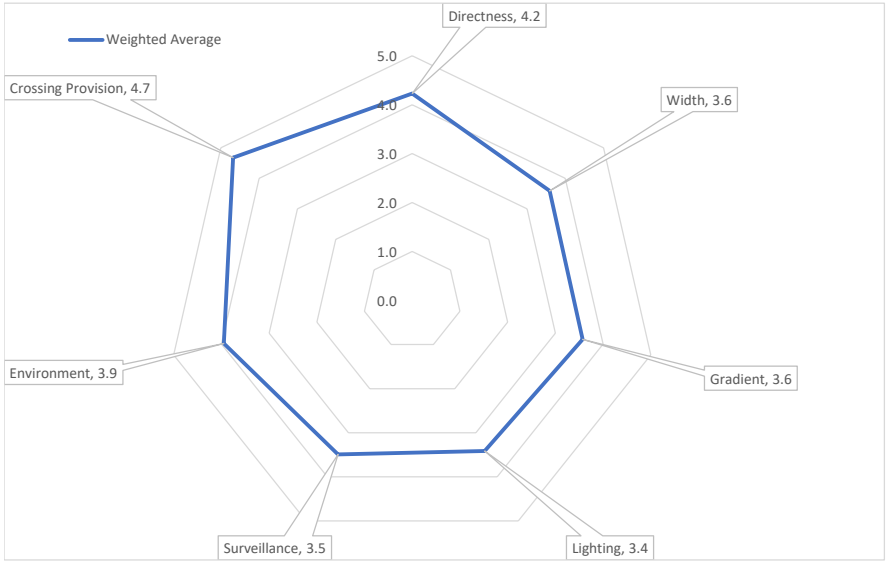
Option	Route	Distance (km)
a	Snatts Road/public footpath/Lealands Drive/The Drive/North Row/London Road/Southview Drive/Downsview Crescent	1.80
b	Snatts Road/public footpath (via steps)/Hunters Way/Manor Way/London Road/Southview Drive/Downsview Crescent	1.75
c	Snatts Road/Claremont Rise/Cambridge Way/Uplands Drive/London Road/Southview Drive/Downsview Crescent	2.03
d	Rocks Road/Church Street/High Street/Southview Drive/ Downsview Crescent	1.74

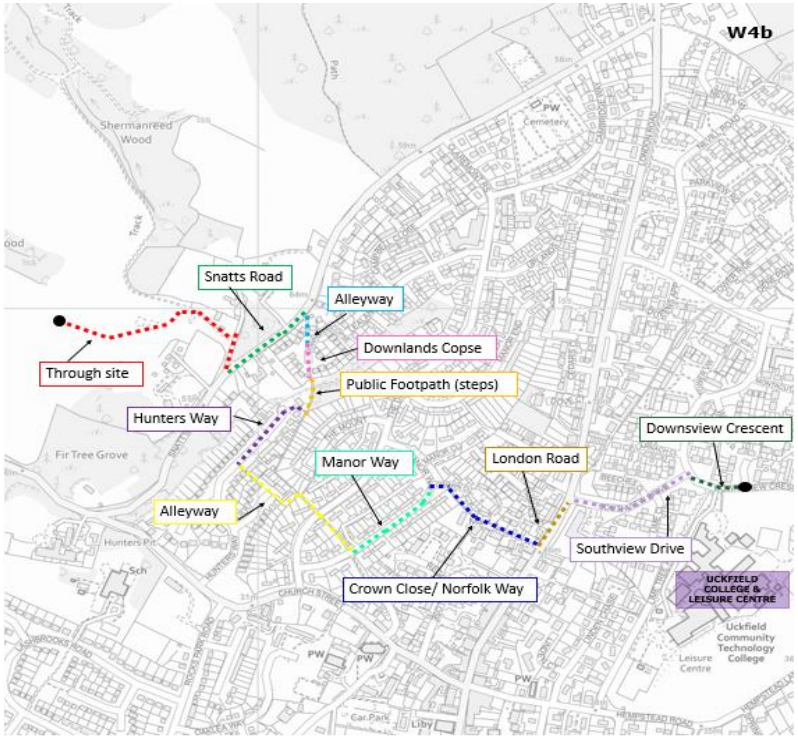
Route Option			**Directness**		**Width**		**Gradient**		**Lighting**		**Surveillance**		**Environment**		**Crossing Provision**		**Overall Score**	
a	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	4	0.8	5	1.0	4	0.8	5	1.0	3	0.6	4	0.8	5	1.0	4.3	0.8
	Snatts Road	170	4	0.4	1	0.1	4	0.4	1	0.1	2	0.2	3	0.3	1	0.1	2.3	0.2
	Alleyway	40	4	0.1	3	0.1	3	0.1	1	0.0	1	0.0	2	0.0	5	0.1	2.7	0.1
	Downlands Copse	60	4	0.1	4	0.1	4	0.1	4	0.1	5	0.2	5	0.2	5	0.2	4.4	0.1
	Lealands Drive	260	4	0.6	4	0.6	3	0.4	4	0.6	5	0.7	5	0.7	5	0.7	4.3	0.6
	The Drive	275	4	0.6	4	0.6	2	0.3	3	0.5	5	0.8	5	0.8	5	0.8	4.0	0.6
	Manor End	90	4	0.2	4	0.2	2	0.1	3	0.2	5	0.3	4	0.2	5	0.3	3.9	0.2
	North Row	215	4	0.5	3	0.4	3	0.4	2	0.2	5	0.6	3	0.4	5	0.6	3.6	0.4
	London Road	45	4	0.1	3	0.1	4	0.1	4	0.1	5	0.1	3	0.1	1	0.0	3.4	0.1
	Southview Drive	195	4	0.4	3	0.3	2	0.2	4	0.4	5	0.5	5	0.5	5	0.5	4.0	0.4
	Downsview Crescent	100	4	0.2	4	0.2	4	0.2	5	0.3	5	0.3	5	0.3	5	0.3	4.6	0.3
	TOTAL	**1800**		**4.0**		**3.6**		**3.1**		**3.5**		**4.2**		**4.2**		**4.5**		**3.9**



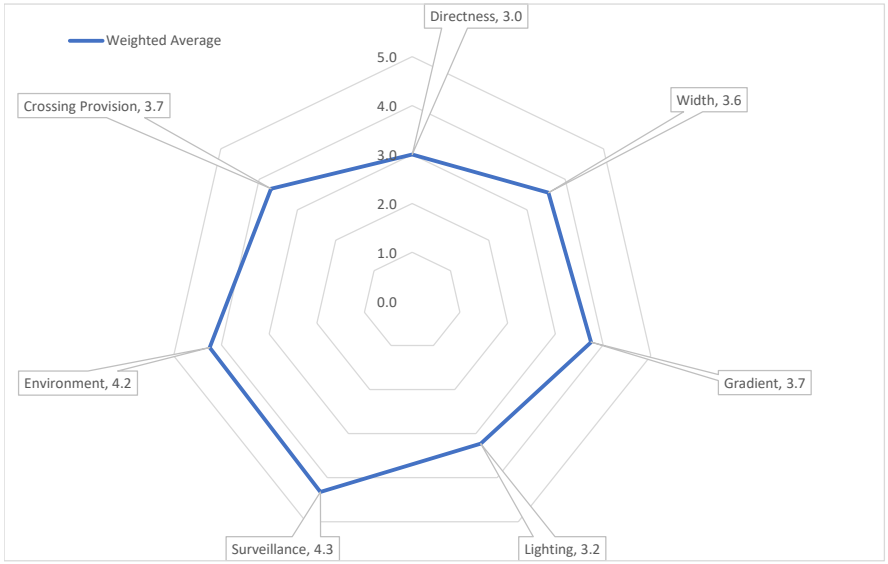


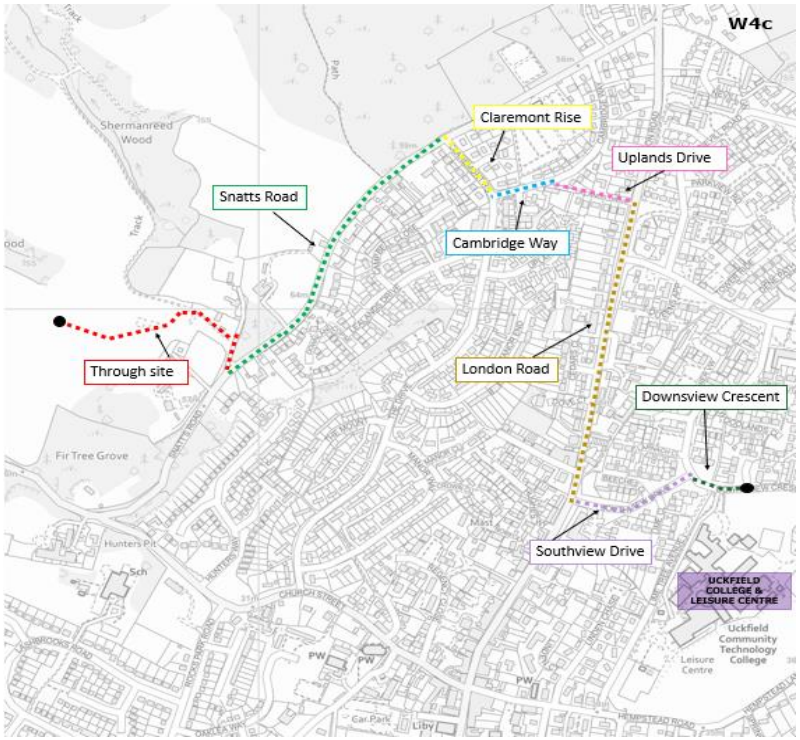
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
b	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	4	0.8	5	1.0	4	0.8	5	1.0	3	0.6	4	0.8	5	1.0	4.3	0.9
	Snatts Road	170	4	0.4	1	0.1	4	0.4	1	0.1	2	0.2	3	0.3	1	0.1	2.3	0.2
	Alleyway	40	4	0.1	3	0.1	3	0.1	1	0.0	1	0.0	2	0.0	5	0.1	2.7	0.1
	Downlands Copse	60	4	0.1	4	0.1	4	0.1	4	0.1	5	0.2	5	0.2	5	0.2	4.4	0.2
	Public footpath (steps)	85	4	0.2	1	0.0	1	0.0	1	0.0	1	0.0	2	0.1	5	0.2	2.1	0.1
	Hunters Way	120	4	0.3	4	0.3	4	0.3	3	0.2	5	0.3	5	0.3	5	0.3	4.3	0.3
	Alleyway	250	4	0.6	3	0.4	3	0.4	1	0.1	1	0.1	2	0.3	5	0.7	2.7	0.4
	Manor Way	170	4	0.4	4	0.4	4	0.4	4	0.4	5	0.5	5	0.5	5	0.5	4.4	0.4
	Crown Close/Norfolk	215	4	0.5	3	0.4	3	0.4	3	0.4	3	0.4	3	0.4	5	0.6	3.4	0.4
	London Road	95	4	0.2	4	0.2	4	0.2	5	0.3	5	0.3	4	0.2	1	0.1	3.9	0.2
	Southview Drive	195	4	0.4	3	0.3	2	0.2	4	0.4	5	0.6	5	0.6	5	0.6	4.0	0.4
	Downsview Crescent	100	4	0.2	4	0.2	4	0.2	5	0.3	5	0.3	5	0.3	5	0.3	4.6	0.3
	TOTAL	**1750**		**4.2**		**3.6**		**3.6**		**3.4**		**3.5**		**3.9**		**4.7**		**3.8**



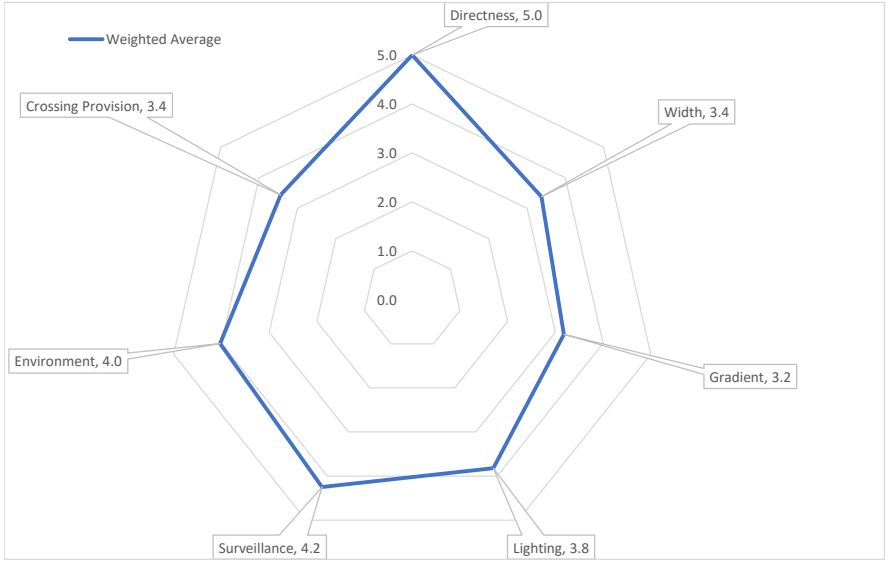


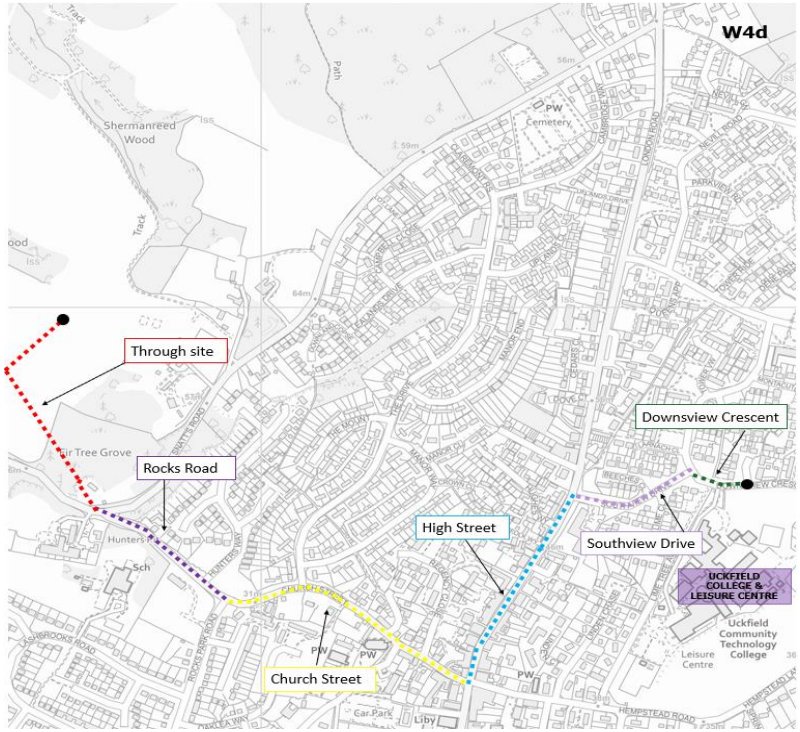
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
c	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through Site	350	3	0.5	5	0.9	4	0.7	5	0.9	3	0.5	4	0.7	5	0.9	4.1	0.7
	Snatts Road	535	3	0.8	3	0.8	4	1.1	1	0.3	4	1.1	4	1.1	1	0.3	2.9	0.8
	Claremont Rise	120	3	0.2	4	0.2	3	0.2	4	0.2	5	0.3	5	0.3	5	0.3	4.1	0.2
	Cambridge Way	80	3	0.1	4	0.2	4	0.2	4	0.2	5	0.2	5	0.2	5	0.2	4.3	0.2
	Uplands Drive	135	3	0.2	4	0.3	4	0.3	1	0.1	4	0.3	4	0.3	5	0.3	3.6	0.2
	London Road	510	3	0.8	3	0.8	4	1.0	4	1.0	5	1.3	4	1.0	4	1.0	3.9	1.0
	Southview Drive	195	3	0.3	3	0.3	2	0.2	4	0.4	5	0.5	5	0.5	5	0.5	3.9	0.4
	Downsview Crescent	100	3	0.1	4	0.2	4	0.2	5	0.2	5	0.2	5	0.2	5	0.2	4.4	0.2
	TOTAL	**2025**		**3.0**		**3.6**		**3.7**		**3.2**		**4.3**		**4.2**		**3.7**		**3.7**





Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
d	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	405	5	1.2	5	1.2	4	0.9	5	1.2	3	0.7	4	0.9	5	1.2	4.4	1.0
	Rocks Road	250	5	0.7	2	0.3	3	0.4	1	0.1	3	0.4	3	0.4	1	0.1	2.6	0.4
	Church Street	430	5	1.2	3	0.7	3	0.7	3	0.7	5	1.2	4	1.0	1	0.2	3.4	0.8
	High Street	360	5	1.0	3	0.6	3	0.6	5	1.0	5	1.0	4	0.8	5	1.0	4.3	0.9
	Southview Drive	195	5	0.6	3	0.3	2	0.2	4	0.4	5	0.6	5	0.6	5	0.6	4.1	0.5
	Downsview Crescent	100	5	0.3	4	0.2	4	0.2	5	0.3	5	0.3	5	0.3	5	0.3	4.7	0.3
	TOTAL	**1740**		**5.0**		**3.4**		**3.2**		**3.8**		**4.2**		**4.0**		**3.4**		**3.9**





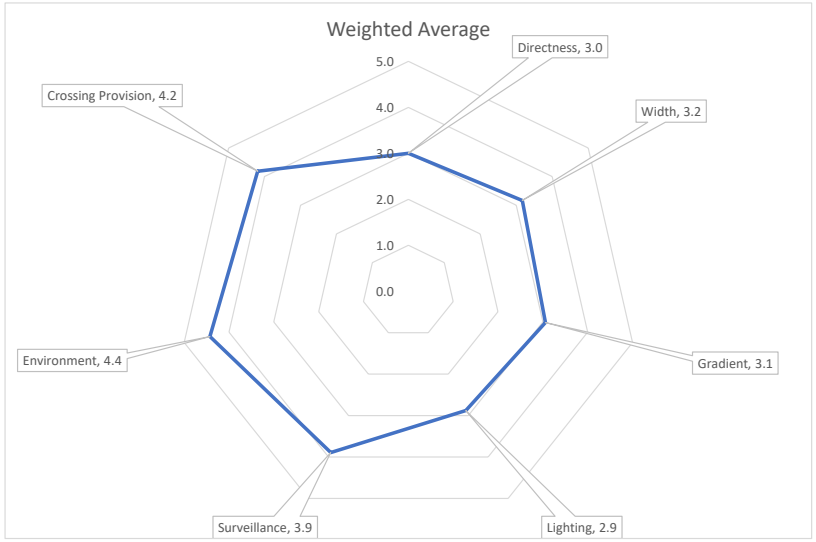
NMU Appendix C

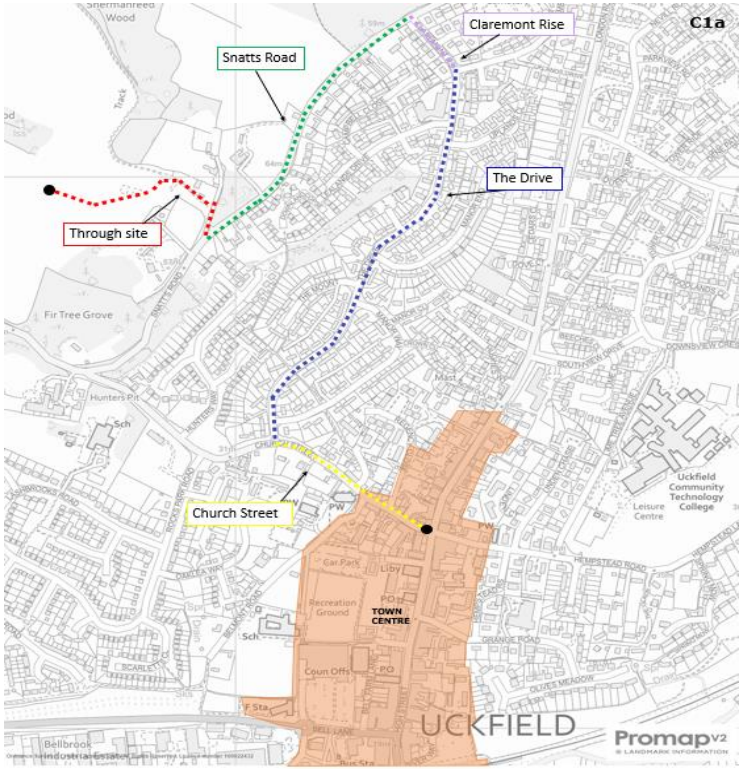
Cycling Audit

1: To Town Centre

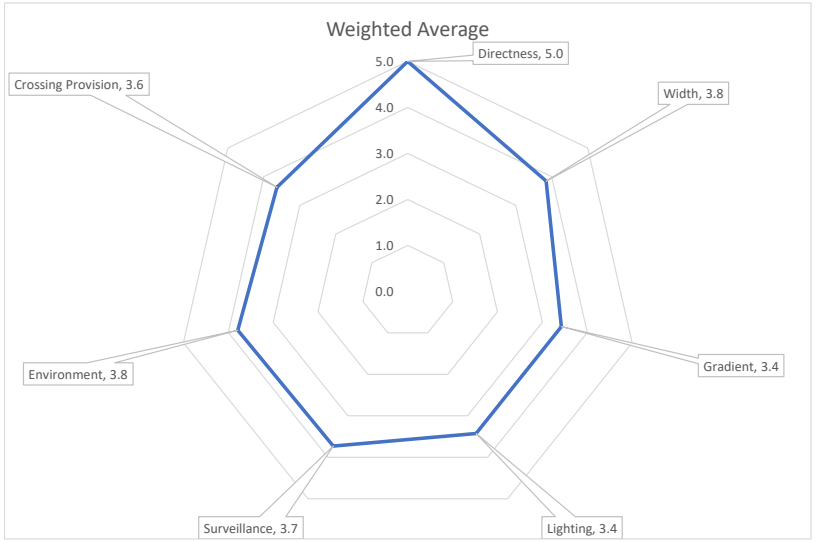
Option	Route	Distance (km)
a	Snatts Road/The Drive/Church Street/High Street	2.08
b	Rocks Road/Church Street/High Street	1.18
c	A22/Bellfarm Road/B2102/High Street	2.71
d	Rocks Road/Rocks Park Road/Scarletts Close/Bellfarm Road	1.76

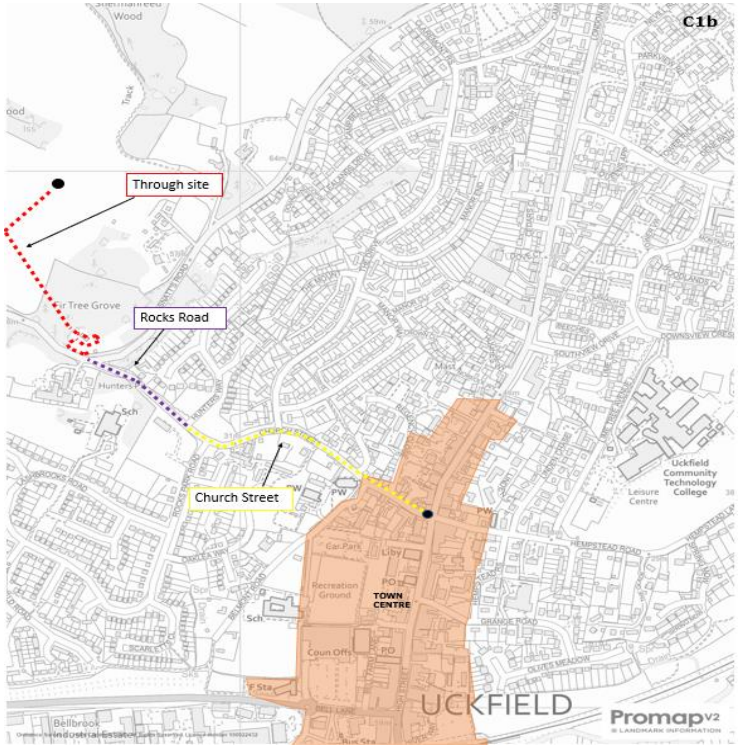
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
a	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	3	0.5	4	0.7	4	0.7	5	0.8	3	0.5	4	0.7	5	0.8	4.0	0.7
	Snatts Road	535	3	0.8	3	0.8	4	1.0	1	0.3	2	0.5	4	1.0	3	0.8	2.9	0.7
	Claremont Rise	120	3	0.2	3	0.2	3	0.2	4	0.2	5	0.3	5	0.3	5	0.3	4.0	0.2
	The Drive	765	3	1.1	3	1.1	2	0.7	3	1.1	5	1.8	5	1.8	5	1.8	3.7	1.4
	Church Street	310	3	0.4	3	0.4	3	0.4	3	0.4	5	0.7	4	0.6	3	0.4	3.4	0.5
	TOTAL	**2080**		**3.0**		**3.2**		**3.1**		**2.9**		**3.9**		**4.4**		**4.2**		**3.5**



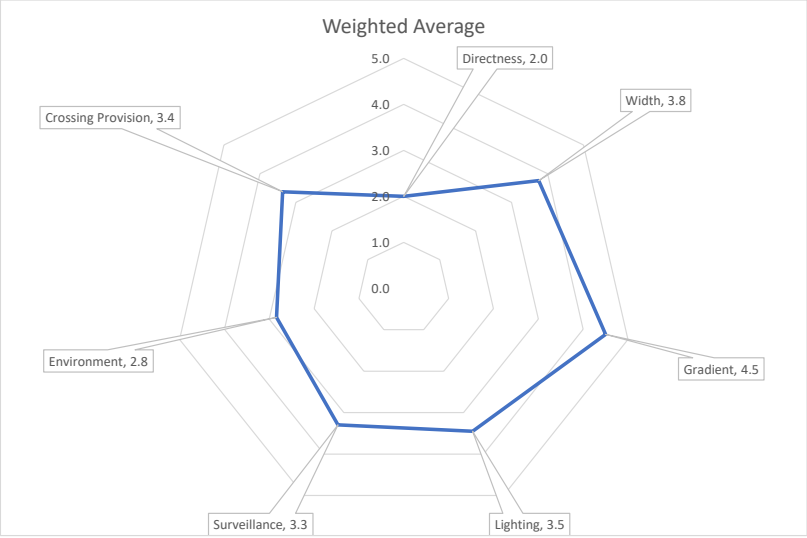


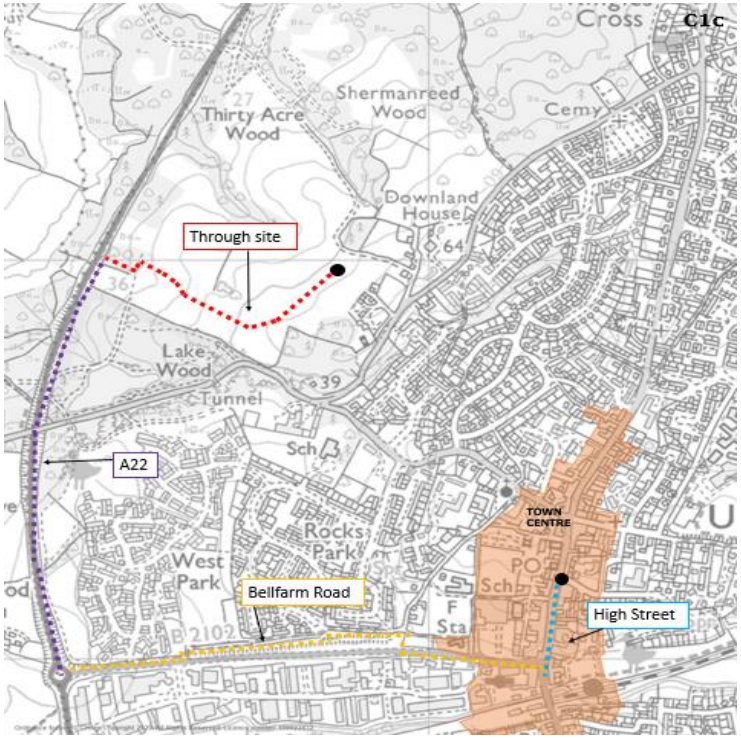
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
b	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	5	2.1	5	2.1	4	1.7	5	2.1	3	1.3	4	1.7	5	2.1	4.4	1.9
	Rocks Road	250	5	1.1	3	0.6	3	0.6	1	0.2	3	0.6	3	0.6	2	0.4	2.9	0.6
	Church Street	430	5	1.8	3	1.1	3	1.1	3	1.1	5	1.8	4	1.5	3	1.1	3.7	1.4
	TOTAL	**1180**		**5.0**		**3.8**		**3.4**		**3.4**		**3.7**		**3.8**		**3.6**		**3.8**



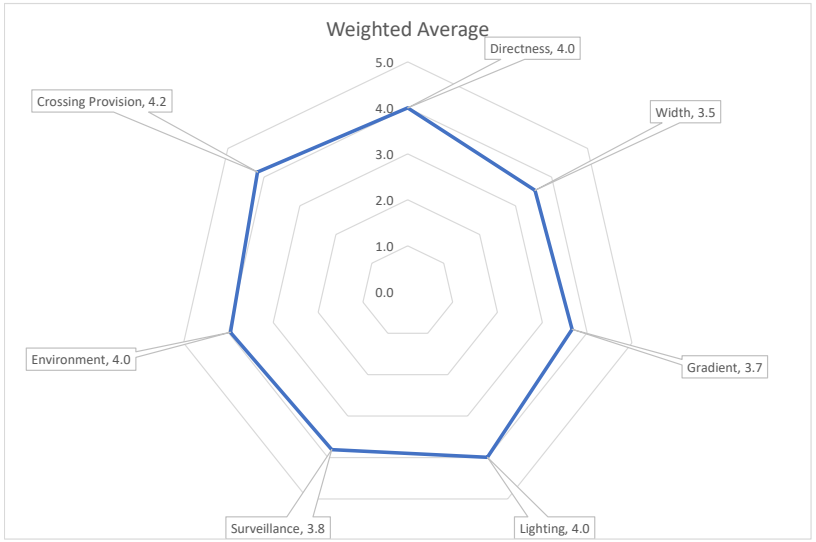


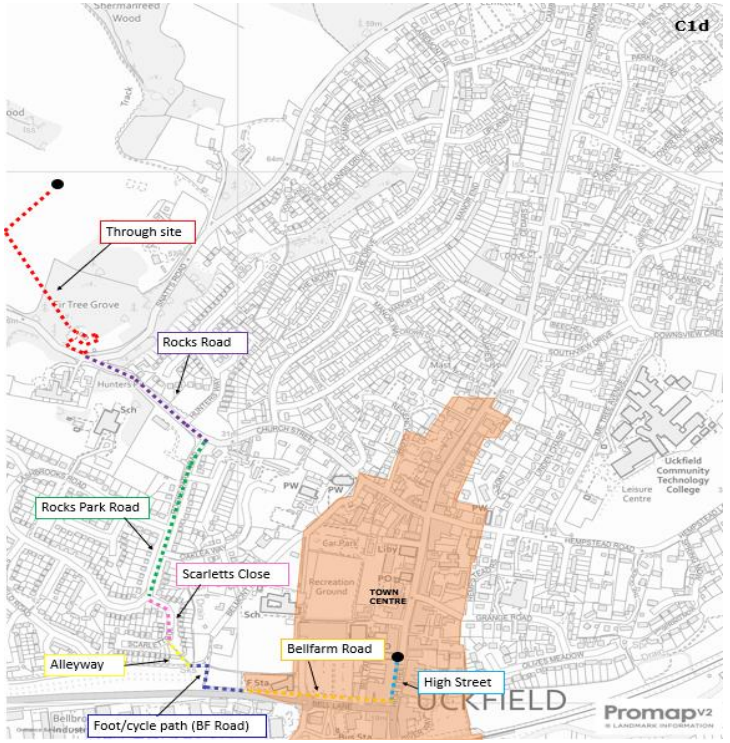
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
c	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	2	0.4	5	0.9	5	0.9	5	0.9	4	0.7	4	0.7	5	0.9	4.3	0.8
	A22	1050	2	0.8	4	1.5	4	1.5	1	0.4	3	1.2	1	0.4	3	1.2	2.6	1.0
	Bellfarm Road	1010	2	0.7	3	1.1	5	1.9	5	1.9	3	1.1	4	1.5	3	1.1	3.6	1.3
	High Street	150	2	0.1	3	0.2	3	0.2	5	0.3	5	0.3	4	0.2	3	0.2	3.6	0.2
	TOTAL	**2710**		**2.0**		**3.8**		**4.5**		**3.5**		**3.3**		**2.8**		**3.4**		**3.3**





Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
d	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	4	1.1	5	1.4	4	1.1	5	1.4	3	0.9	4	1.1	5	1.4	4.3	1.2
	Rocks Road	250	4	0.6	3	0.4	3	0.4	1	0.1	3	0.4	3	0.4	2	0.3	2.7	0.4
	Rocks Park Road	305	4	0.7	3	0.5	3	0.5	4	0.7	5	0.9	5	0.9	5	0.9	4.1	0.7
	Scarletts Close	110	4	0.3	3	0.2	2	0.1	4	0.3	5	0.3	5	0.3	5	0.3	4.0	0.3
	Alleyway	55	4	0.1	2	0.1	3	0.1	2	0.1	1	0.0	3	0.1	5	0.2	2.9	0.1
	Foot/cyclepath (BF Rd)	190	4	0.4	3	0.3	5	0.5	4	0.4	3	0.3	3	0.3	5	0.5	3.9	0.4
	Bellfarm Road	200	4	0.5	3	0.3	5	0.6	5	0.6	5	0.6	4	0.5	3	0.3	4.1	0.5
	High Street	150	4	0.3	3	0.3	3	0.3	5	0.4	5	0.4	4	0.3	3	0.3	3.9	0.3
	TOTAL	**1760**		**4.0**		**3.5**		**3.7**		**4.0**		**3.8**		**4.0**		**4.2**		**3.9**

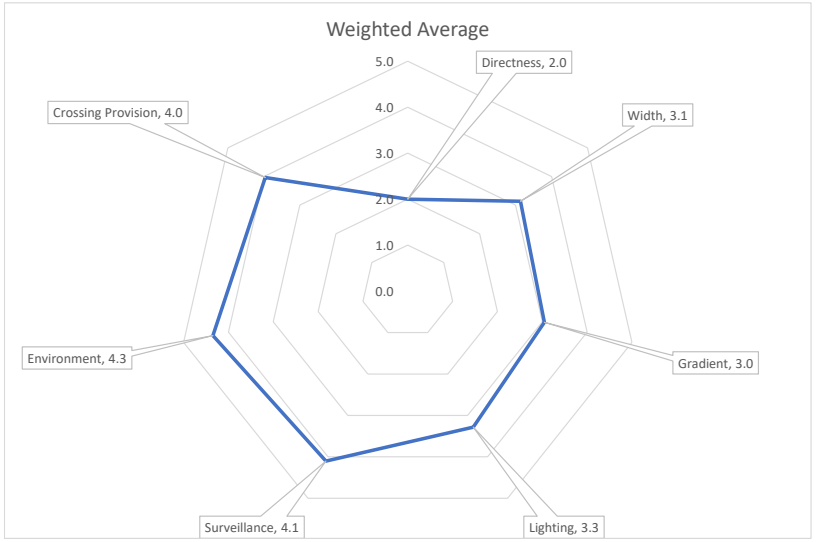


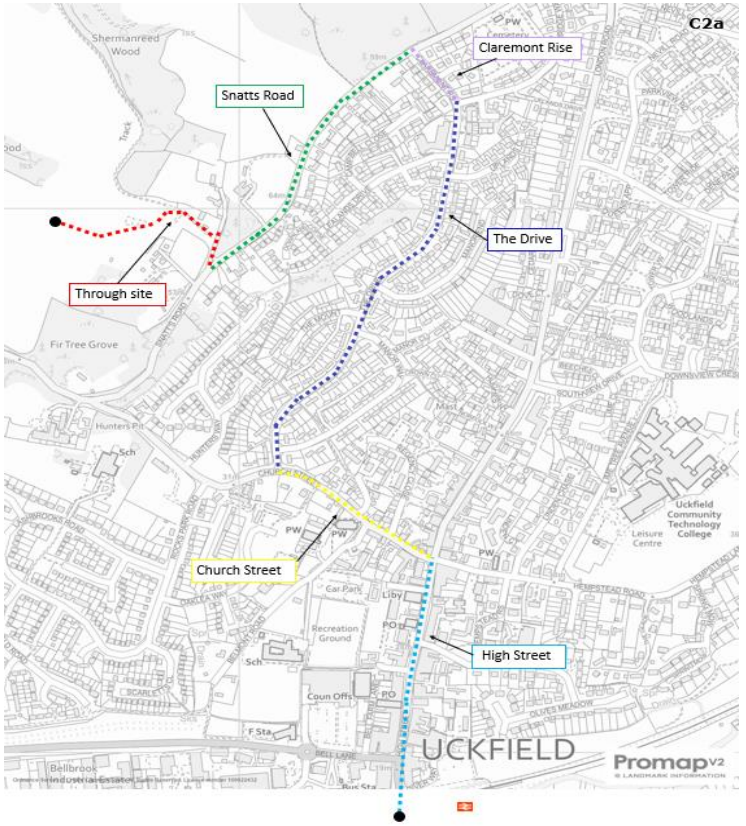


2: To Railway Station

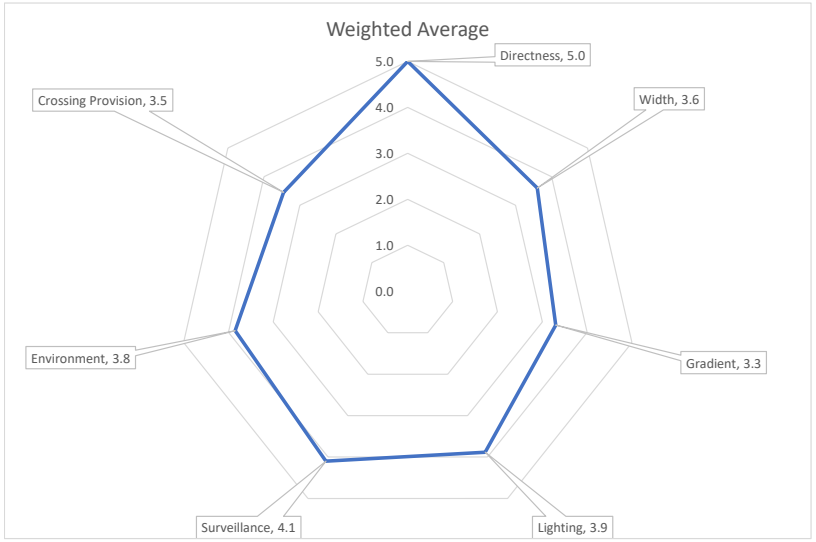
Option	Route	Distance (km)
a	Snatts Road/The Drive/Church Street/High Street	2.57
b	Rocks Road/Church Street/High Street	1.67
c	A22/Bellfarm Road/B2102/High Street	2.66
d	Rocks Road/Rocks Park Road/Scarletts Close/Bellfarm Road	1.71

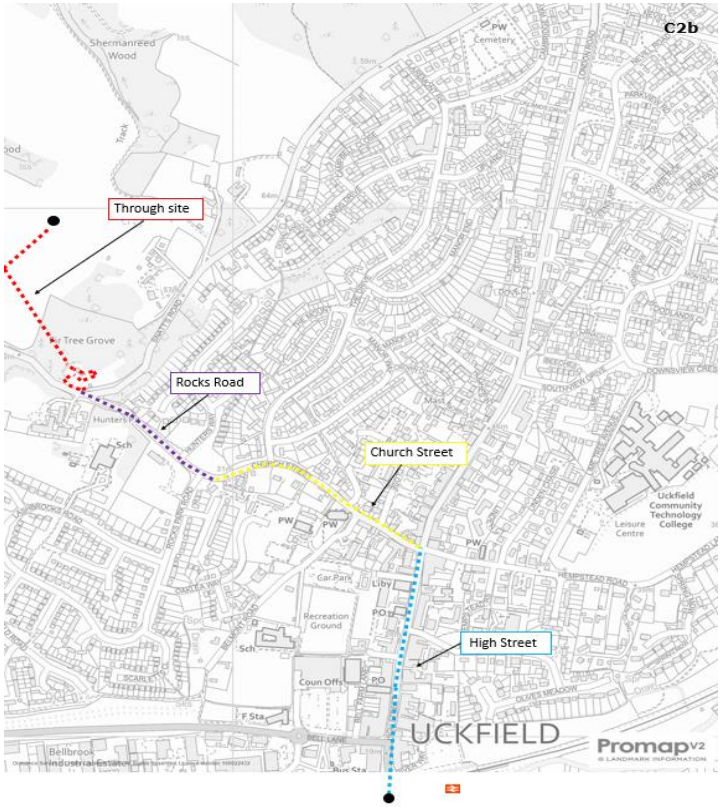
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
a	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	2	0.3	4	0.5	4	0.5	5	0.7	3	0.4	4	0.5	5	0.7	3.9	0.5
	Snatts Road	535	2	0.4	3	0.6	4	0.8	1	0.2	2	0.4	4	0.8	3	0.6	2.7	0.6
	Claremont Rise	120	2	0.1	3	0.1	3	0.1	4	0.2	5	0.2	5	0.2	5	0.2	3.9	0.2
	The Drive	765	2	0.6	3	0.9	2	0.6	3	0.9	5	1.5	5	1.5	5	1.5	3.6	1.1
	Church Street	310	2	0.2	3	0.4	3	0.4	3	0.4	5	0.6	4	0.5	3	0.4	3.3	0.4
	High Street	485	2	0.4	3	0.6	3	0.6	5	0.9	5	0.9	4	0.8	3	0.6	3.6	0.7
	TOTAL	**2565**		**2.0**		**3.1**		**3.0**		**3.3**		**4.1**		**4.3**		**4.0**		**3.4**



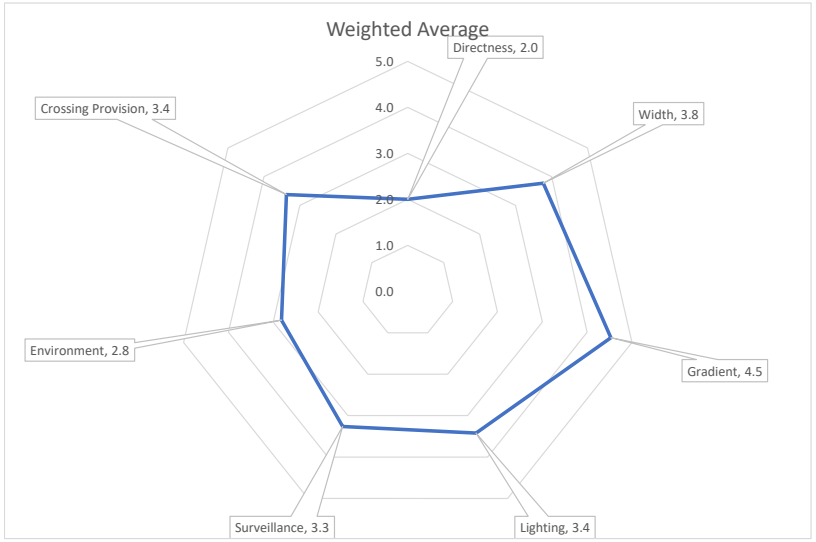


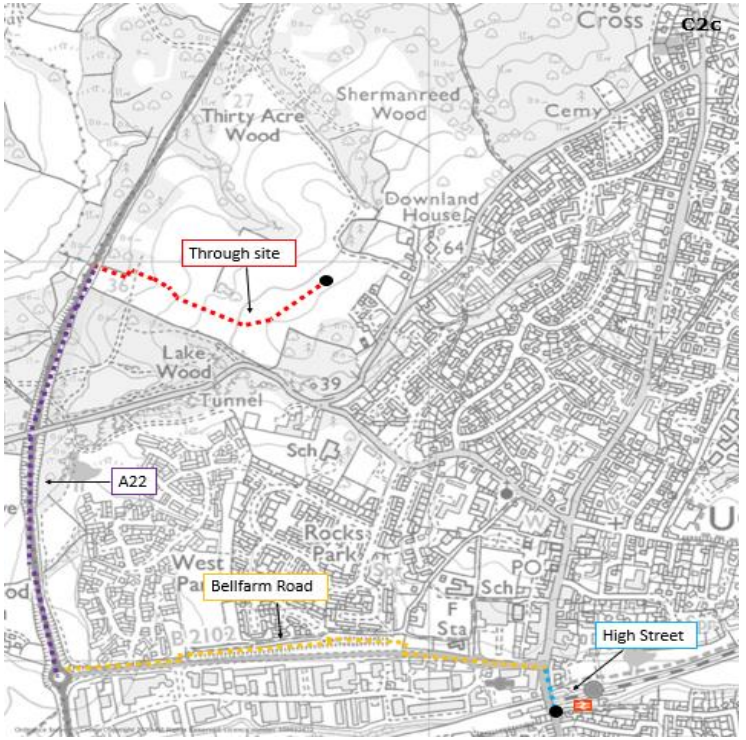
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
b	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	5	1.50	5	1.50	4	1.20	5	1.50	3	0.90	4	1.20	5	1.50	4.4	1.3
	Rocks Road	250	5	0.75	3	0.45	3	0.45	1	0.15	3	0.45	3	0.45	2	0.30	2.9	0.4
	Church Street	430	5	1.29	3	0.77	3	0.77	3	0.77	5	1.29	4	1.03	3	0.77	3.7	1.0
	High Street	485	5	1.46	3	0.87	3	0.87	5	1.46	5	1.46	4	1.17	3	0.87	4.0	1.2
	TOTAL	**1665**		**5.00**		**3.60**		**3.30**		**3.88**		**4.10**		**3.85**		**3.45**		**3.9**



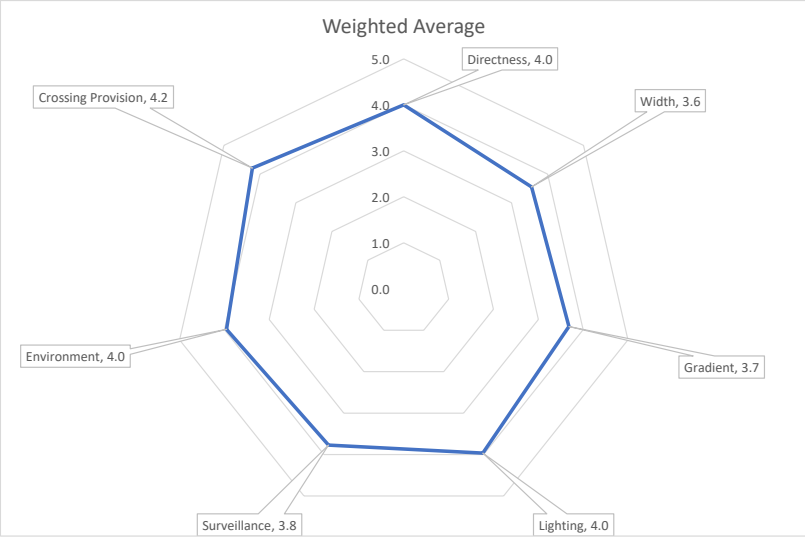


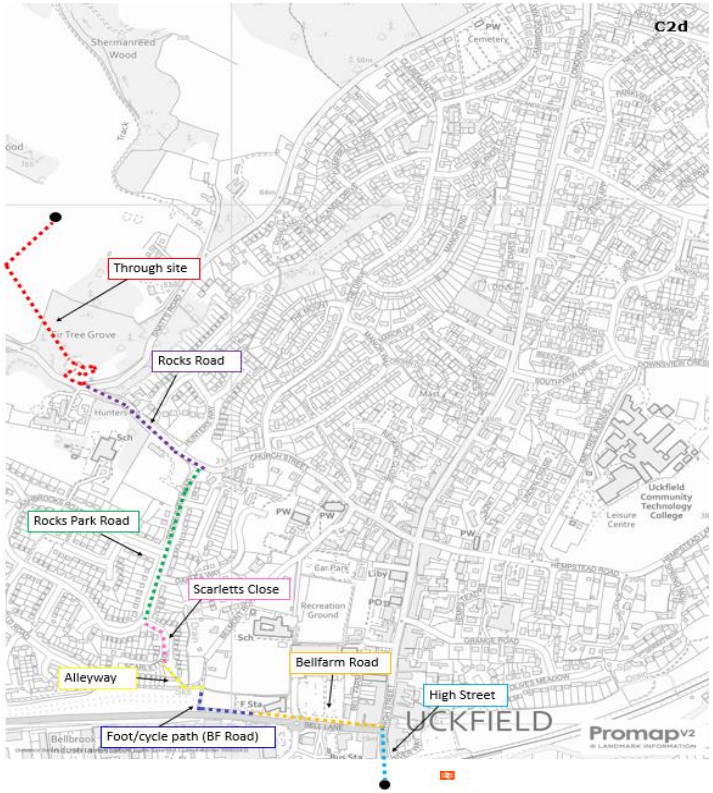
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
c	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	2	0.38	5	0.94	5	0.94	5	0.94	4	0.75	4	0.75	5	0.94	4.3	0.8
	A22	1050	2	0.79	4	1.58	4	1.58	1	0.39	3	1.18	1	0.39	3	1.18	2.6	1.0
	Bellfarm Road	1010	2	0.76	3	1.14	5	1.90	5	1.90	3	1.14	4	1.52	3	1.14	3.6	1.4
	High Street	100	2	0.08	3	0.11	3	0.11	5	0.19	5	0.19	4	0.15	3	0.11	3.6	0.1
	TOTAL	**2660**		**2.00**		**3.77**		**4.53**		**3.42**		**3.26**		**2.82**		**3.38**		**3.3**





Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
d	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	4	1.17	5	1.46	4	1.17	5	1.46	3	0.88	4	1.17	5	1.46	4.3	1.3
	Rocks Road	250	4	0.58	3	0.44	3	0.44	1	0.15	3	0.44	3	0.44	2	0.29	2.7	0.4
	Rocks Park Road	305	4	0.71	3	0.54	3	0.54	4	0.71	5	0.89	5	0.89	5	0.89	4.1	0.7
	Scarletts Close	110	4	0.26	3	0.19	2	0.13	4	0.26	5	0.32	5	0.32	5	0.32	4.0	0.3
	Alleyway	55	4	0.13	2	0.06	3	0.10	2	0.06	1	0.03	3	0.10	5	0.16	2.9	0.1
	Foot/cycleparth (BF Rd)	190	4	0.44	3	0.33	5	0.56	4	0.44	3	0.33	3	0.33	5	0.56	3.9	0.4
	Bellfarm Road	200	4	0.47	3	0.35	5	0.58	5	0.58	5	0.58	4	0.47	3	0.35	4.1	0.5
	High Street	100	4	0.23	3	0.18	3	0.18	5	0.29	5	0.29	4	0.23	3	0.18	3.9	0.2
	TOTAL	**1710**		**4.00**		**3.55**		**3.68**		**3.96**		**3.77**		**3.95**		**4.21**		**3.9**

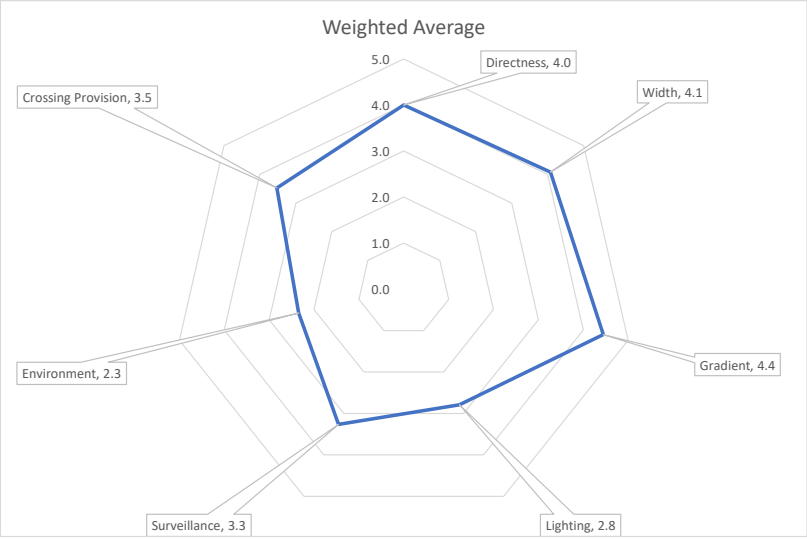


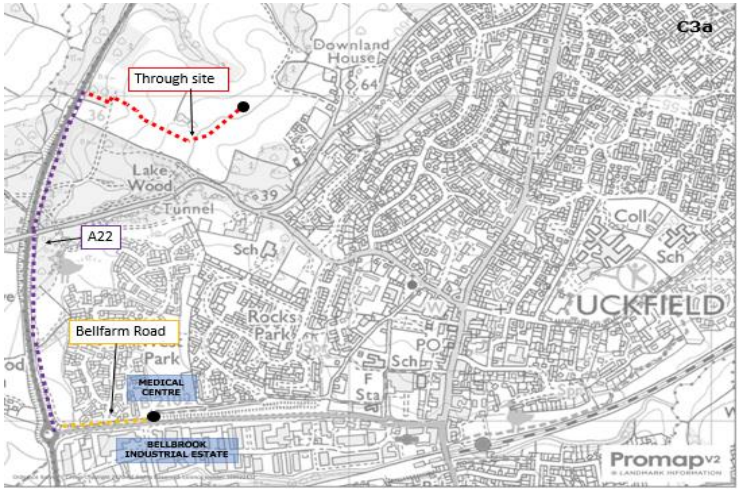


3: To Bellbrook Industrial Estate & Medical Centre

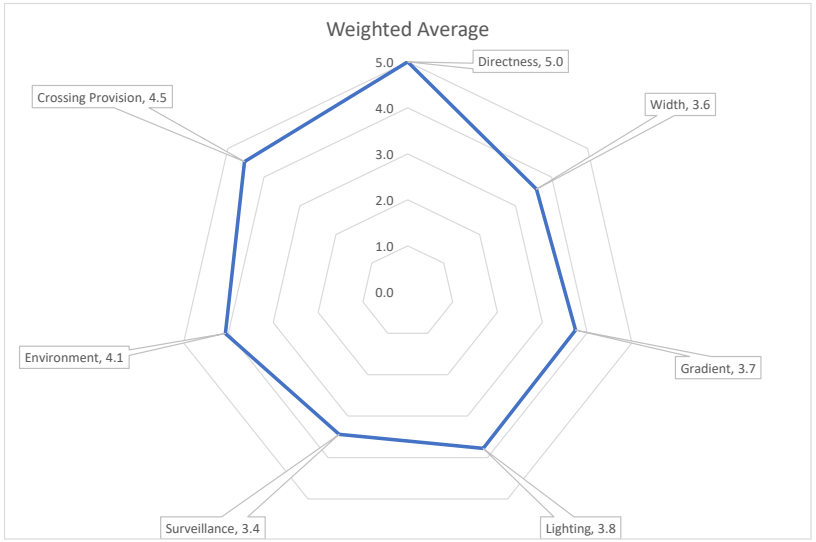
Option	Route	Distance (km)
a	A22/Bellfarm Road	1.90
b	Rocks Road/Rocks Park Road/Scarletts Close/Bellfarm Road	1.63
c	Rocks Road/Church Street/Belmont Road/Bellfarm Road	1.92

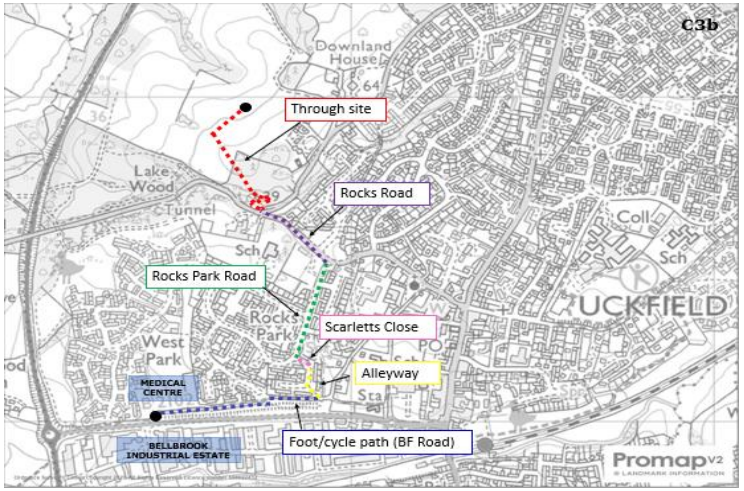
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
a	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	4	1.1	5	1.3	5	1.3	5	1.3	4	1.1	4	1.1	5	1.3	4.6	1.2
	A22	1050	4	2.2	4	2.2	4	2.2	1	0.6	3	1.7	1	0.6	3	1.7	2.9	1.6
	Bellfarm Road	350	4	0.7	3	0.6	5	0.9	5	0.9	3	0.6	4	0.7	3	0.6	3.9	0.7
	TOTAL	**1900**		**4.0**		**4.1**		**4.4**		**2.8**		**3.3**		**2.3**		**3.5**		**3.5**



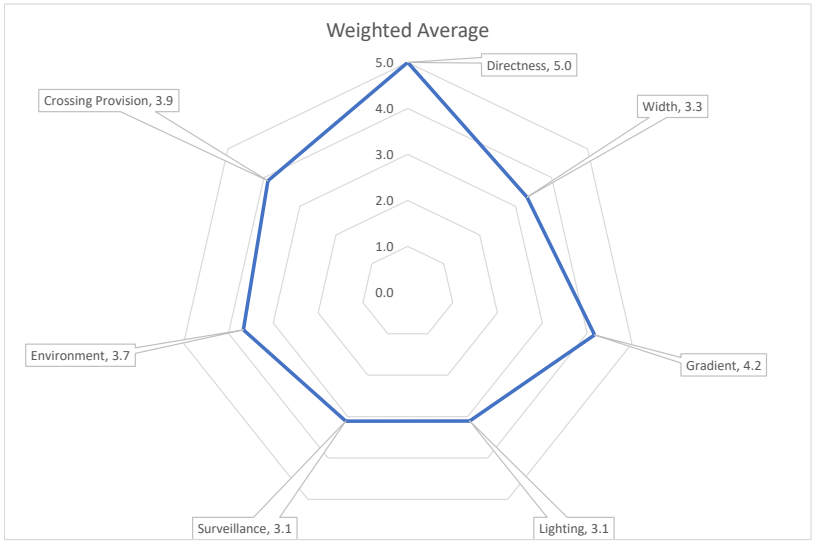


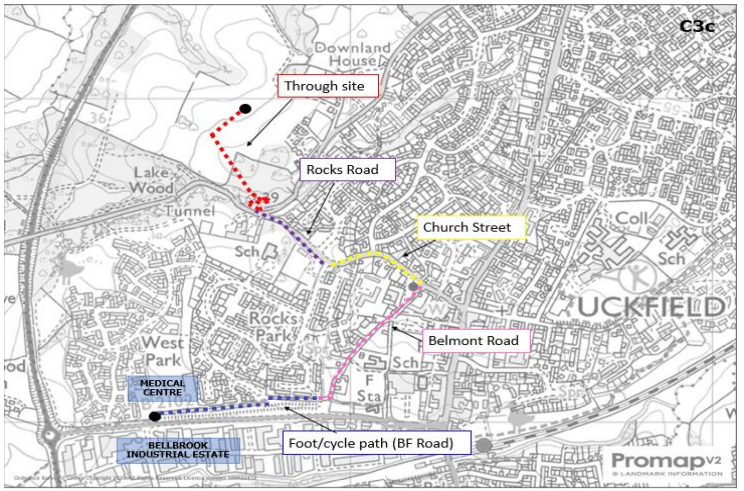
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
b	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	5	1.5	5	1.5	4	1.2	5	1.5	3	0.9	4	1.2	5	1.5	4.4	1.4
	Rocks Road	250	5	0.8	3	0.5	3	0.5	1	0.2	3	0.5	3	0.5	2	0.3	2.9	0.4
	Rocks Park Road	305	5	0.9	3	0.6	3	0.6	4	0.7	5	0.9	5	0.9	5	0.9	4.3	0.8
	Scarletts Close	110	5	0.3	3	0.2	2	0.1	4	0.3	5	0.3	5	0.3	5	0.3	4.1	0.3
	Alleyway	55	5	0.2	2	0.1	3	0.1	2	0.1	1	0.0	3	0.1	5	0.2	3.0	0.1
	Foot/cycle path (BF Rd)	410	5	1.3	3	0.8	5	1.3	4	1.0	3	0.8	4	1.0	5	1.3	4.1	1.0
	TOTAL	**1630**		**5.0**		**3.6**		**3.7**		**3.8**		**3.4**		**4.1**		**4.5**		**4.0**





Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
c	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	500	5	1.3	5	1.3	4	1.0	5	1.3	3	0.8	4	1.0	5	1.3	4.4	1.2
	Rocks Road	250	5	0.7	3	0.4	3	0.4	1	0.1	3	0.4	3	0.4	2	0.3	2.9	0.4
	Church Street	300	5	0.8	3	0.5	3	0.5	3	0.5	5	0.8	4	0.6	3	0.5	3.7	0.6
	Belmont Road	390	5	1.0	2	0.4	5	1.0	1	0.2	2	0.4	3	0.6	3	0.6	3.0	0.6
	Foot/cycle path (BF Rd)	480	5	1.3	3	0.8	5	1.3	4	1.0	3	0.8	4	1.0	5	1.3	4.1	1.0
	TOTAL	**1920**		**5.0**		**3.3**		**4.2**		**3.1**		**3.1**		**3.7**		**3.9**		**3.8**

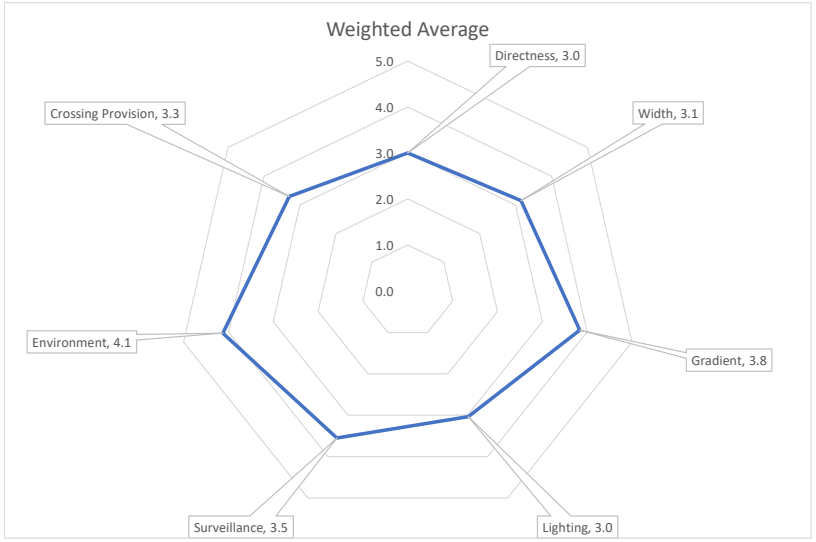


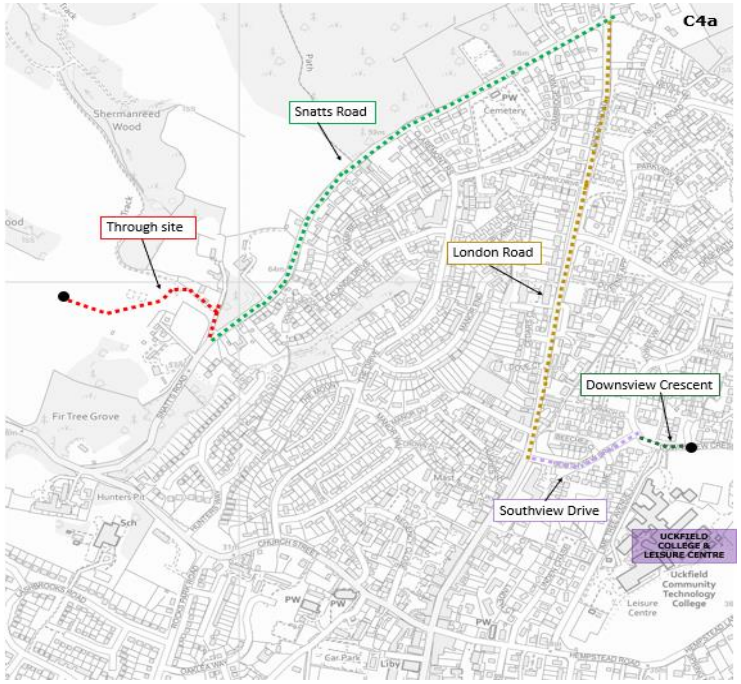


4: To Uckfield College, Leisure Centre & Manor Primary

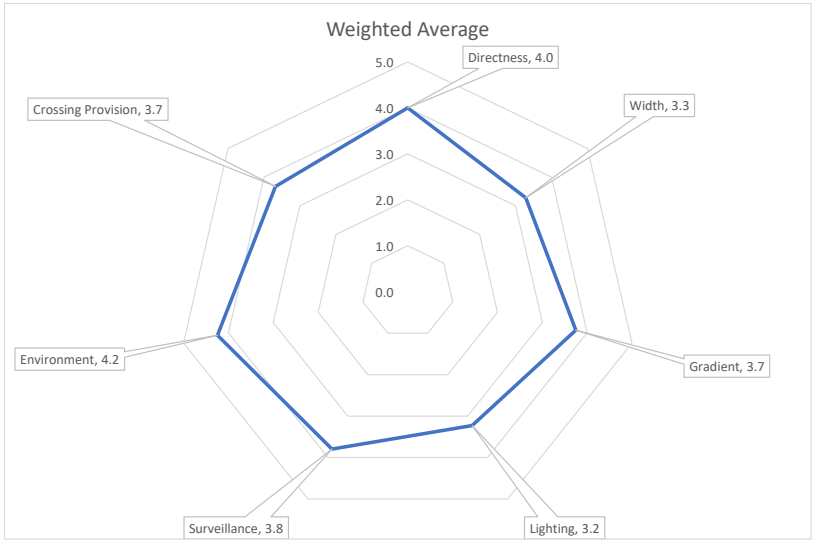
Option	Route	Distance (km)
a	Snatts Road/London Road/Southview Drive/Downsview Crescent	2.38
b	Snatts Road/Claremont Rise/Cambridge Way/Uplands Drive/London Road/Southview Drive/Downsview Crescent	2.03
c	Rocks Road/Church Street/High Street/Southview Drive/Downsview Crescent	1.84

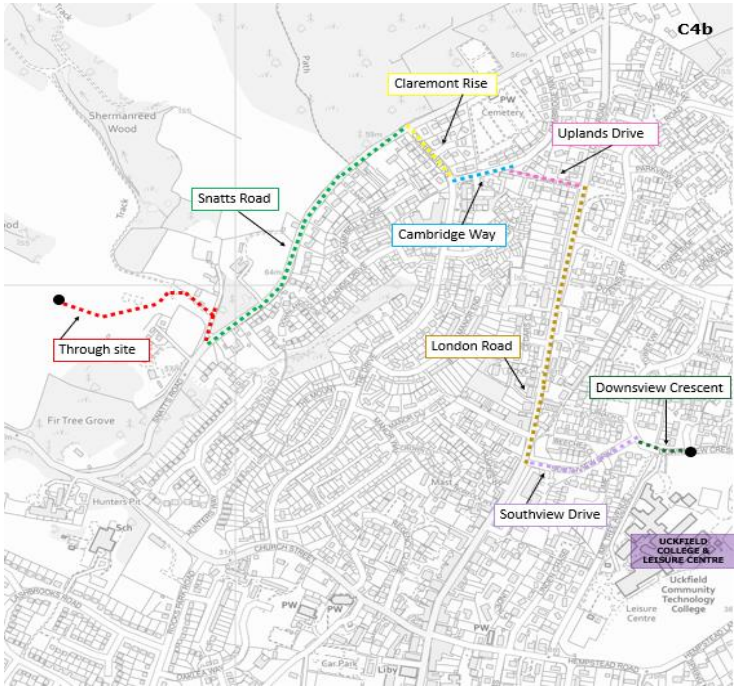
Route Option			**Directness**		**Width**		**Gradient**		**Lighting**		**Surveillance**		**Environment**		**Crossing Provision**		**Overall Score**	
a	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	3	0.4	4	0.6	4	0.6	5	0.7	3	0.4	4	0.6	5	0.7	4.0	0.6
	Snatts Road	915	3	1.2	3	1.2	4	1.5	1	0.4	2	0.8	4	1.5	3	1.2	2.9	1.1
	London Road	815	3	1.0	3	1.0	4	1.4	4	1.4	5	1.7	4	1.4	3	1.0	3.7	1.3
	Southview Drive	195	3	0.2	3	0.2	2	0.2	4	0.3	5	0.4	5	0.4	3	0.2	3.6	0.3
	Downsview Crescent	100	3	0.1	3	0.1	4	0.2	5	0.2	5	0.2	5	0.2	3	0.1	4.0	0.2
	TOTAL	**2375**		**3.0**		**3.1**		**3.8**		**3.0**		**3.5**		**4.1**		**3.3**		**3.4**



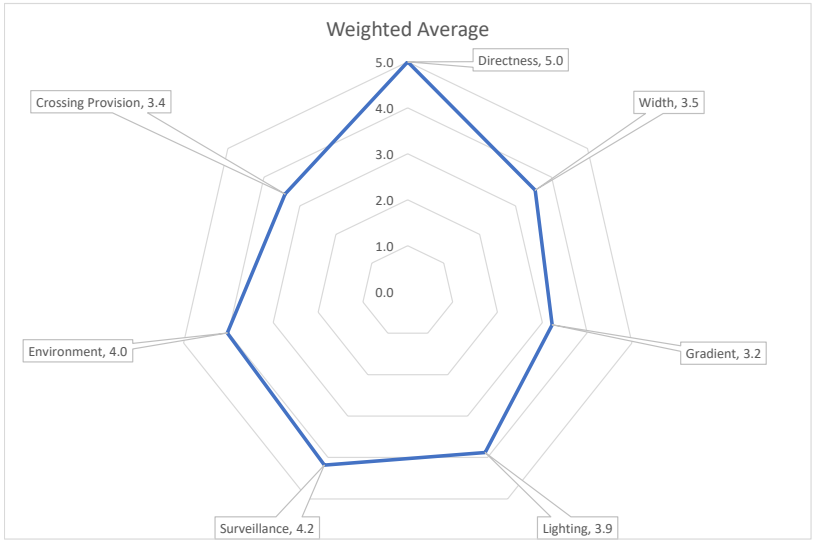


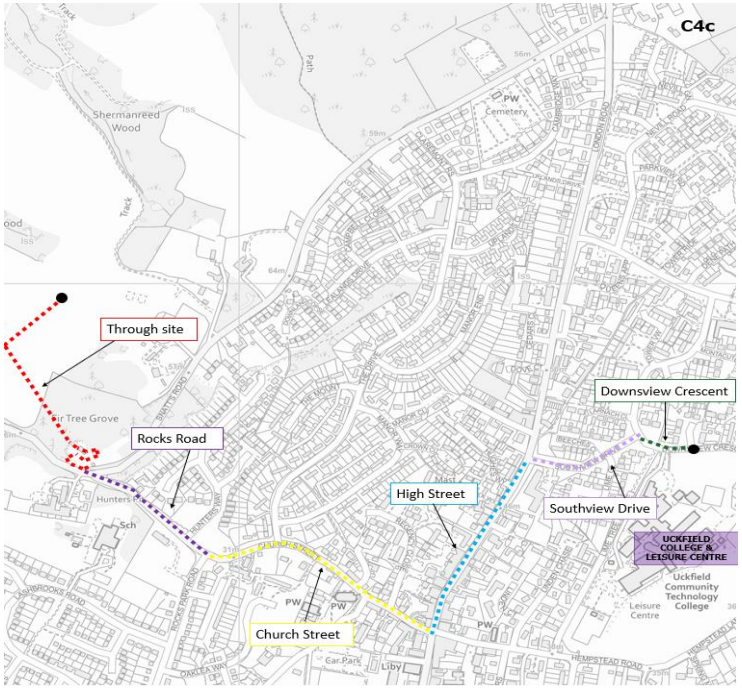
Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
b	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Through site	350	4	0.7	4	0.7	4	0.7	5	0.9	3	0.5	4	0.7	5	0.9	4.1	0.7
	Snatts Road	535	4	1.1	3	0.8	4	1.1	1	0.3	2	0.5	4	1.1	3	0.8	3.0	0.8
	Claremont Rise	120	4	0.2	3	0.2	3	0.2	4	0.2	5	0.3	5	0.3	5	0.3	4.1	0.2
	Cambridge Way	80	4	0.2	4	0.2	4	0.2	4	0.2	5	0.2	5	0.2	5	0.2	4.4	0.2
	Uplands Drive	135	4	0.3	4	0.3	4	0.3	1	0.1	4	0.3	4	0.3	5	0.3	3.7	0.2
	London Road	510	4	1.0	3	0.8	4	1.0	4	1.0	5	1.3	4	1.0	3	0.8	3.9	1.0
	Southview Drive	195	4	0.4	3	0.3	2	0.2	4	0.4	5	0.5	5	0.5	3	0.3	3.7	0.4
	Downsview Crescent	100	4	0.2	3	0.1	4	0.2	5	0.2	5	0.2	5	0.2	3	0.1	4.1	0.2
	TOTAL	**2025**		**4.0**		**3.3**		**3.7**		**3.2**		**3.8**		**4.2**		**3.7**		**3.7**





Route Option			Directness		Width		Gradient		Lighting		Surveillance		Environment		Crossing Provision		Overall Score	
c	Links	Distance (m)	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average	Link Score	Weighted Average
	Though site	500	5	1.4	5	1.4	4	1.1	5	1.4	3	0.8	4	1.1	5	1.4	4.4	1.2
	Rocks Road	250	5	0.7	3	0.4	3	0.4	1	0.1	3	0.4	3	0.4	2	0.3	2.9	0.4
	Church Street	430	5	1.2	3	0.7	3	0.7	3	0.7	5	1.2	4	0.9	3	0.7	3.7	0.9
	High Street	360	5	1.0	3	0.6	3	0.6	5	1.0	5	1.0	4	0.8	3	0.6	4.0	0.8
	Southview Drive	195	5	0.5	3	0.3	2	0.2	4	0.4	5	0.5	5	0.5	3	0.3	3.9	0.4
	Downsview Crescent	100	5	0.3	3	0.2	4	0.2	5	0.3	5	0.3	5	0.3	3	0.2	4.3	0.2
	TOTAL	**1835**		**5.0**		**3.5**		**3.2**		**3.9**		**4.2**		**4.0**		**3.4**		**3.9**





Appendix C

2011 Census Method of Travel to Work Data

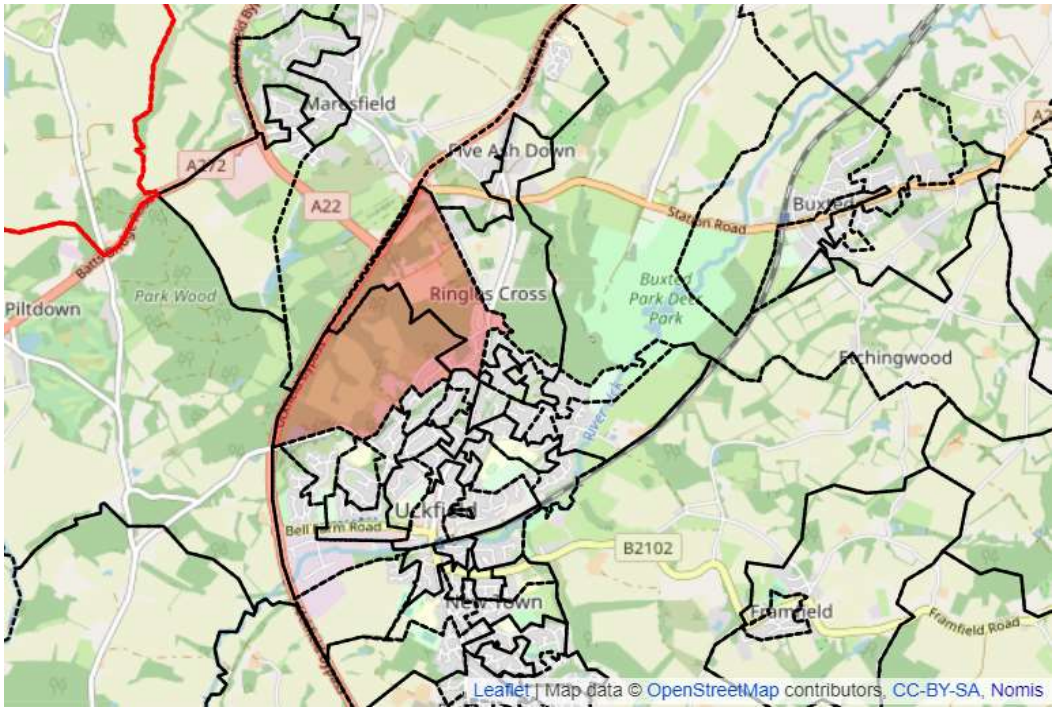
QS703EW - Method of Travel to Work (2001 specification)

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population	All usual residents aged 16 to 74
units	Persons
date	2011

Method of Travel to Work	oa2011:E00107812 (area inc Ringles Cross)		oa2011:E00107814 (the site)		ualad09:Wealden	
All categories: Method of travel to work	227	100%	188	100%	105,879	100%
Work mainly at or from home	27		9		11,746	
Underground, metro, light rail, tram	0	0%	0	0%	144	0%
Train	7	6%	2	2%	4,742	8%
Bus, minibus or coach	4	3%	2	2%	1,383	2%
Taxi	0	0%	0	0%	139	0%
Motorcycle, scooter or moped	1	1%	0	0%	411	1%
Driving a car or van	92	77%	79	81%	43,864	74%
Passenger in a car or van	4	3%	9	9%	2,986	5%
Bicycle	2	2%	0	0%	686	1%
On foot	10	8%	5	5%	4,673	8%
Other method of travel to work	0	0%	0	0%	310	1%
Not in employment	80		82		34,795	

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.



Appendix D

Illustrative Masterplan

Site

DOWNLANDS FARM, UCKFIELD

Drawing

Illustrative masterplan

Scale

1:2000@A1

Date

28.04.22

Drawing ref 1309.**02**

KEY

- Site boundary
- Woodland park incorporating SANG
- Amenity open space
- Community Orchard / amenity space
- Potential location for Natural Childrens Play Area
- Indicative landscape planting / ecology links
- SuDS
- P — Parking for SANG / open space
- Informal recreational footpath
- Proposed vehicular access
- Emergency access / bus only
- Strategic pedestrian / cycle route
- Strategic pedestrian route

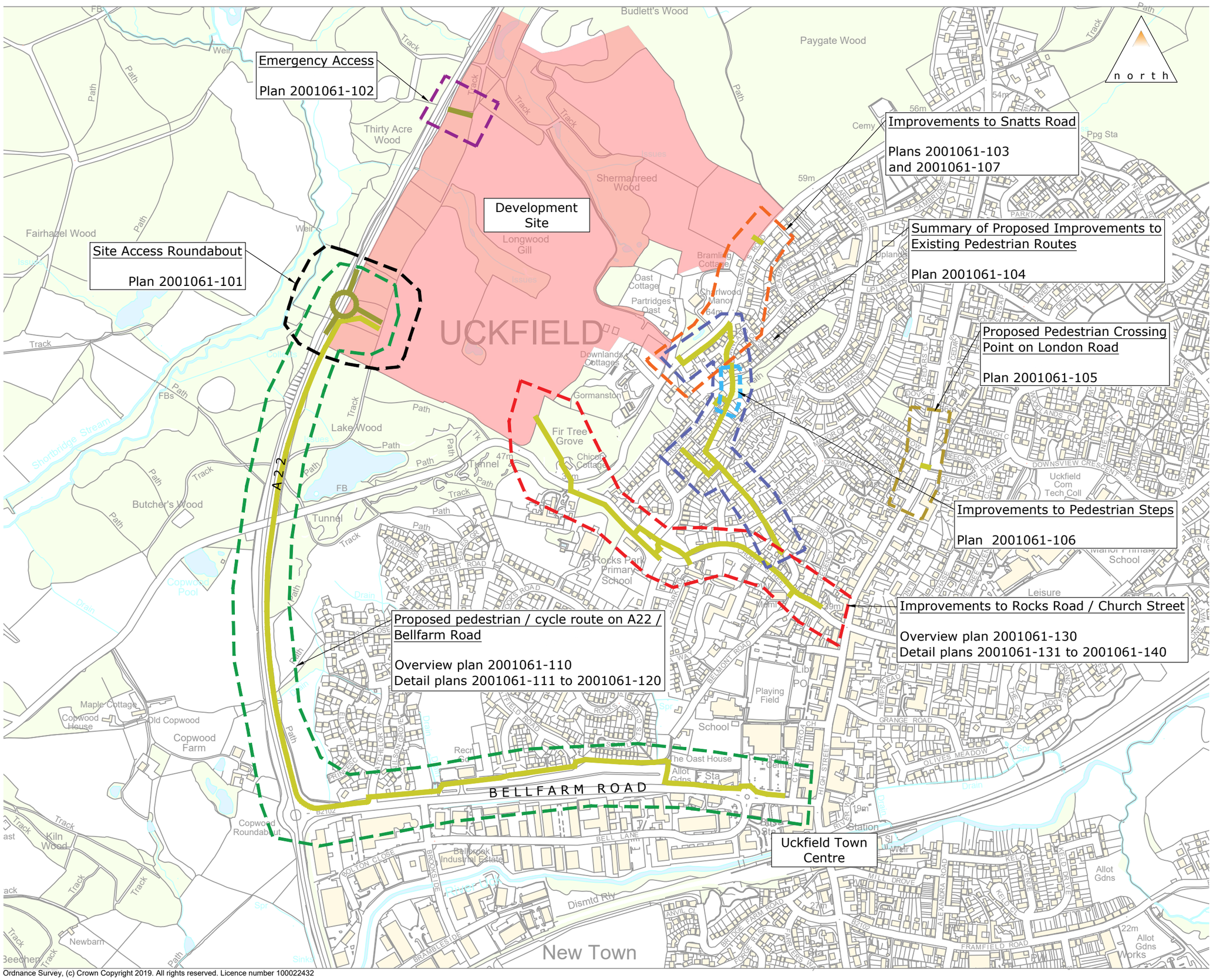
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Appendix E

Access & Off-Site Highway Works Drawings



C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-100b [Overview Plan].dwg

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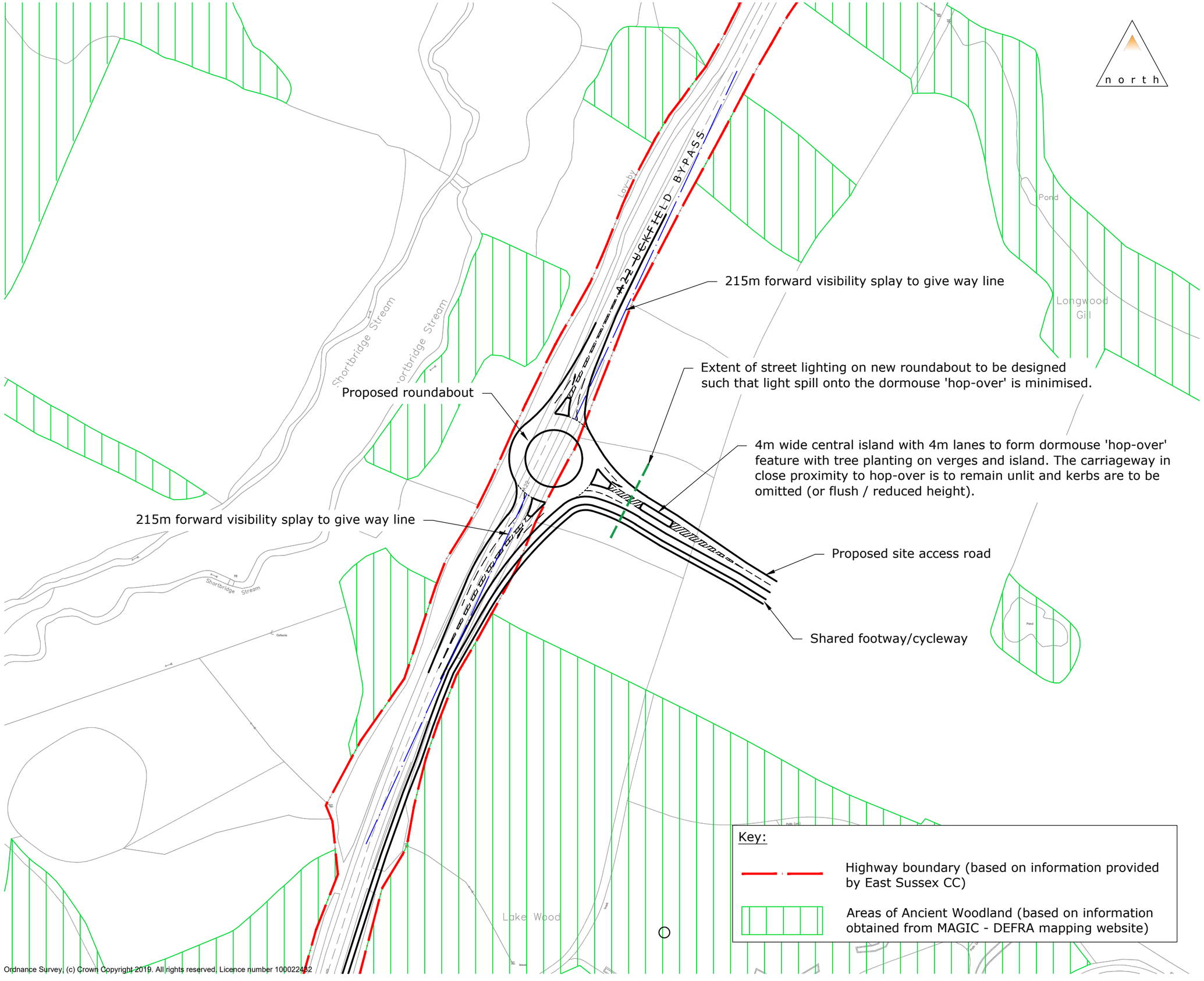
Project:
Downlands Farm, Uckfield

Title:
Overview of Proposed Highway Works

Scale: 1:7,500 (@ A3)

Drawing: 2001061-100

Revision: B



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C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-101a [Site Access Roundabout].dwg

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Project:
Downlands Farm, Uckfield

Title:
Site Access Roundabout

Scale: 1:2,000 (@ A3)

Drawing: 2001061-101

Revision: A

Key:

Highway boundary (based on information provided by East Sussex CC)

Areas of Ancient Woodland

2.4m x 215m visibility splay

ED & Ward Bdy

north

A22

LAYBY

Proposed dropped / splayed kerb for emergency vehicle use only

Removable barrier / bollards secured with FB14 type locks to prevent use by unauthorised vehicles

3.7

Existing layby to be retained

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Project:
Downlands Farm, Uckfield

Title:
Proposed Emergency Access

Scale: 1:1,000 (@ A3)

Drawing: 2001061-102

Revision: B

C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-102b [Emergency Access].dwg

Key:

Highway Boundary (providied by ESCC)

Development Site

Pedestrian Route within Development Site

n o r t h

Proposed pedestrian crossing point

Proposed vehicle access to SANG car park

Existing 1.5m wide footway

Existing footpath leading to town centre

Proposed 1.5m wide footway

Existing vehicle crossover retained

SNATT'S ROAD

DOWNLAND COPSE

Oast Cottage

Partridges Oast

Bramling Cottage

Charlwood Manor Cottage

Charlwood Manor

Swallow Barn

Pond

Dean Bank

Stonewold

Skirwith

Hedgerows

The Hollies

The Coach House

Coombe Bank

64.2m

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Project:
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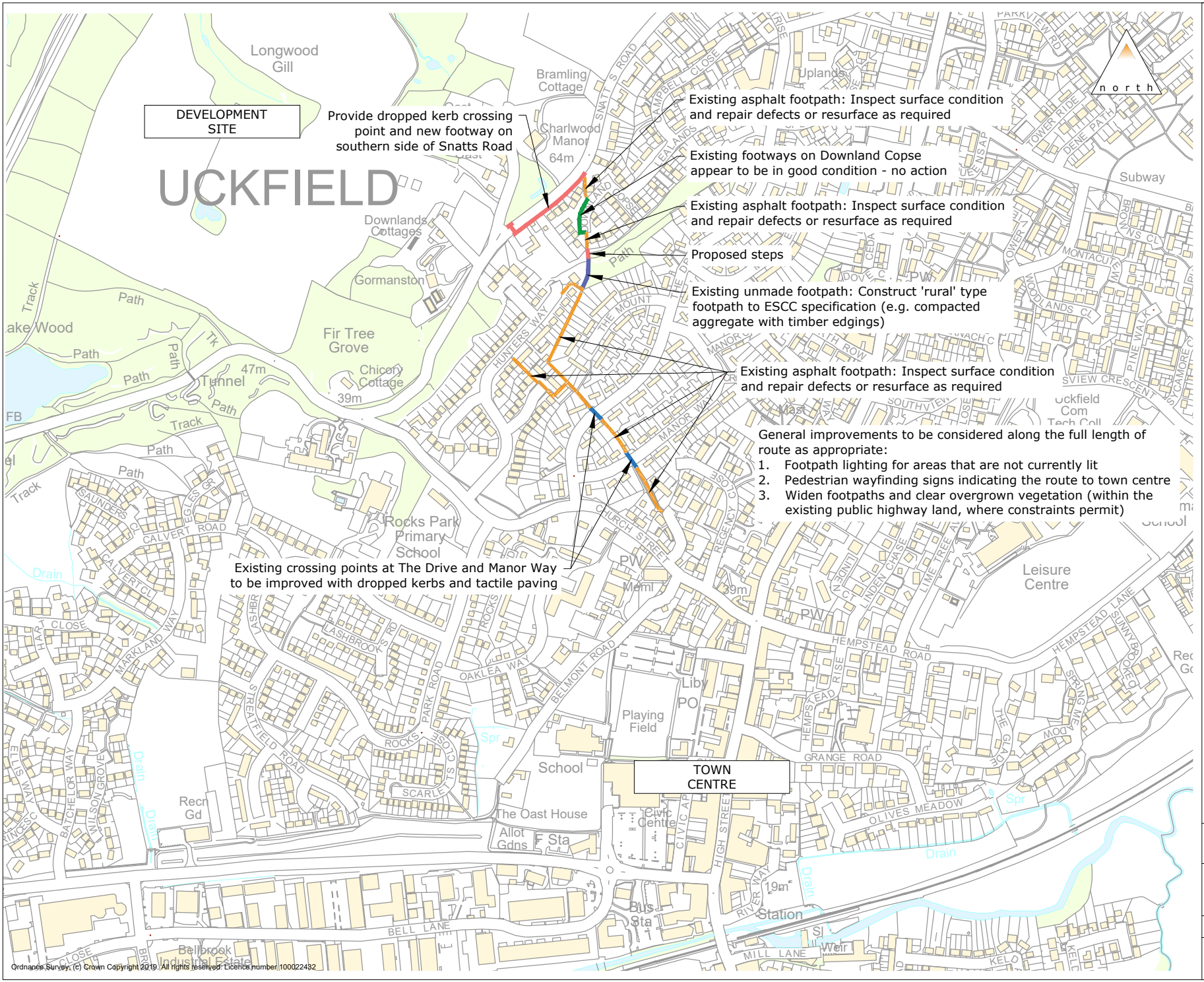
Title:
Proposed Footway at Snatts Road

Scale: 1:1,000 (@ A3)

Drawing: 2001061-103

Revision:

D:\SHAREPOINT\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-103 [Snatts Rd].dwg



D:\SHAREPOINT\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-104 [Ped Route].dwg

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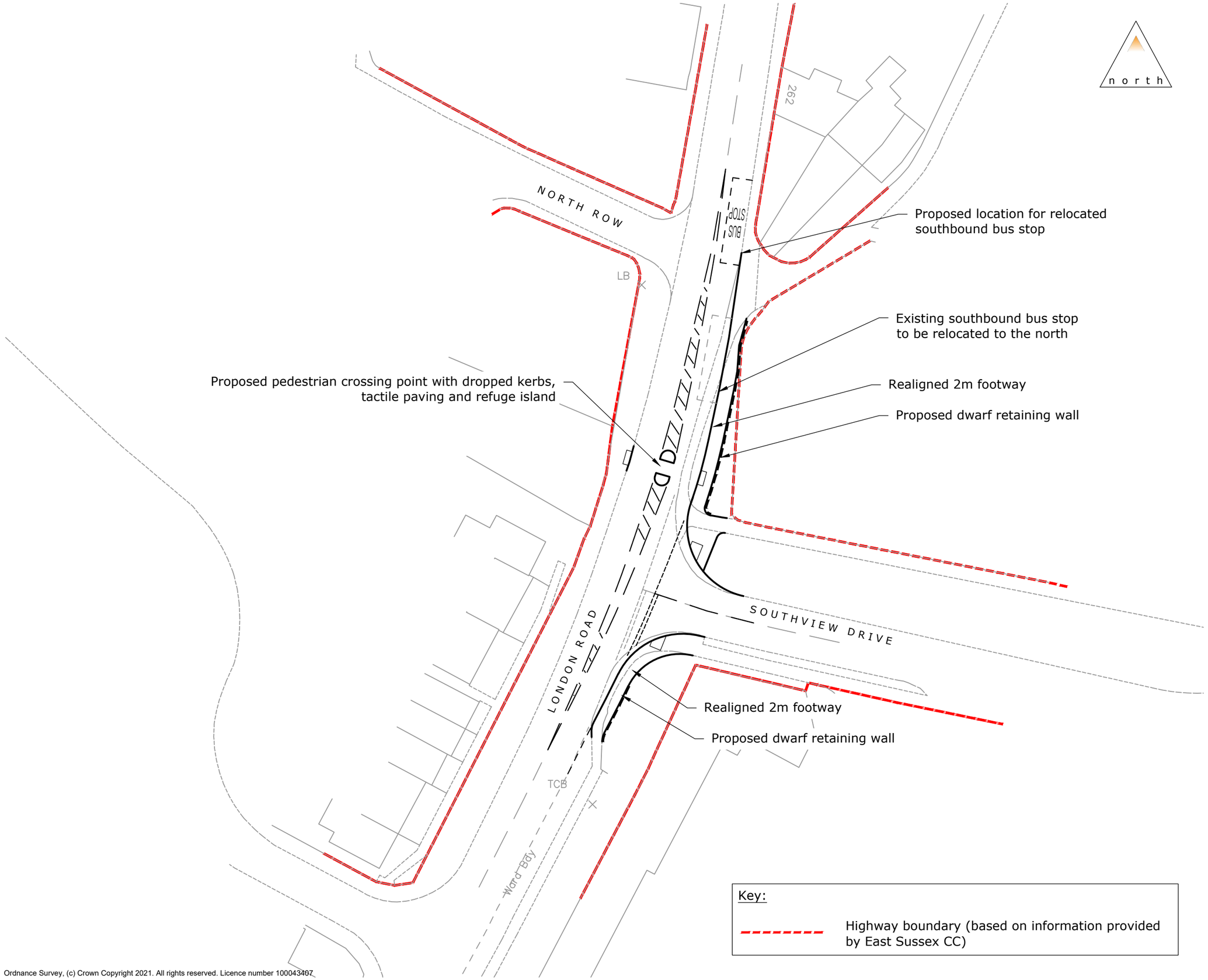
Project:
Downlands Farm, Uckfield

Title:
Possible Improvements to Pedestrian Route

Scale: 1:7,500 (@ A3)

Drawing: 2001061-104

Revision:



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Project:
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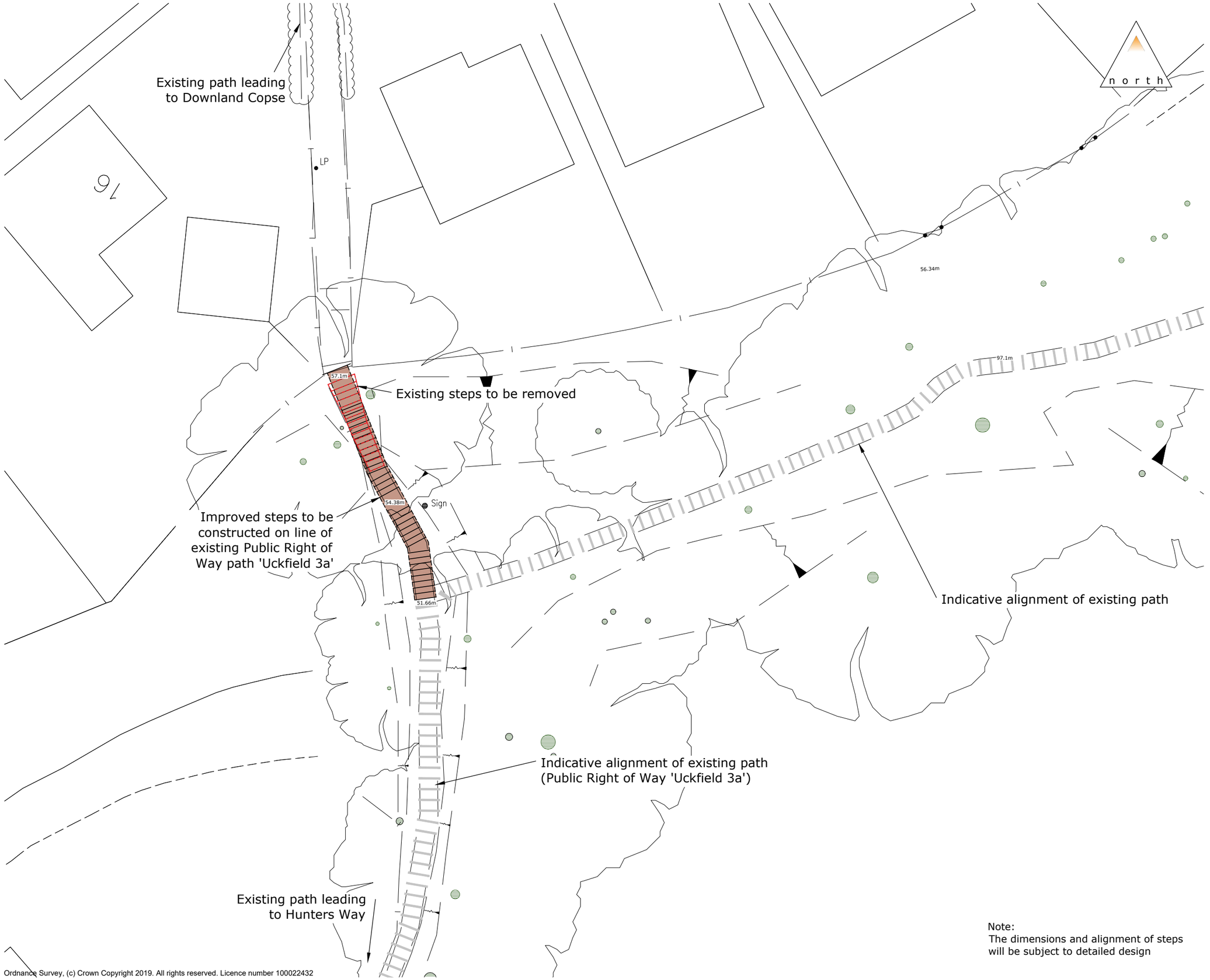
Title:
Proposed Pedestrian Crossing Point on London Road

Scale: 1:500 (@ A3)

Drawing: 2001061-105

Revision: A

D:\SHAREPOINT\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-105a [London Road].dwg



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Note:
The dimensions and alignment of steps will be subject to detailed design

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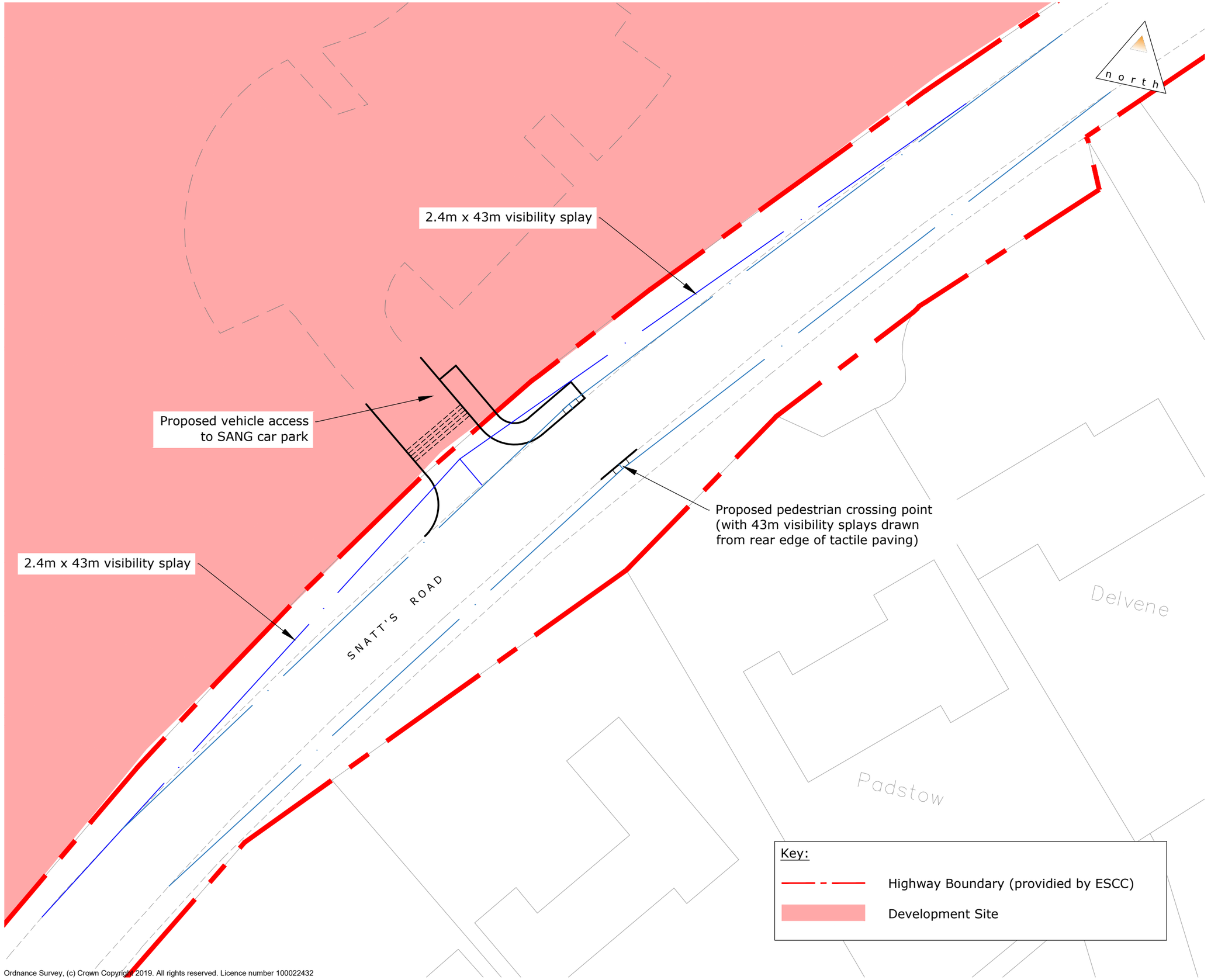
Title:
Indicative Steps Arrangement

Scale: 1:200 (@ A3)

Drawing: 2001061-106

Revision:

D:\SHAREPOINT\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-106 [Improved Steps Arrangement].dwg



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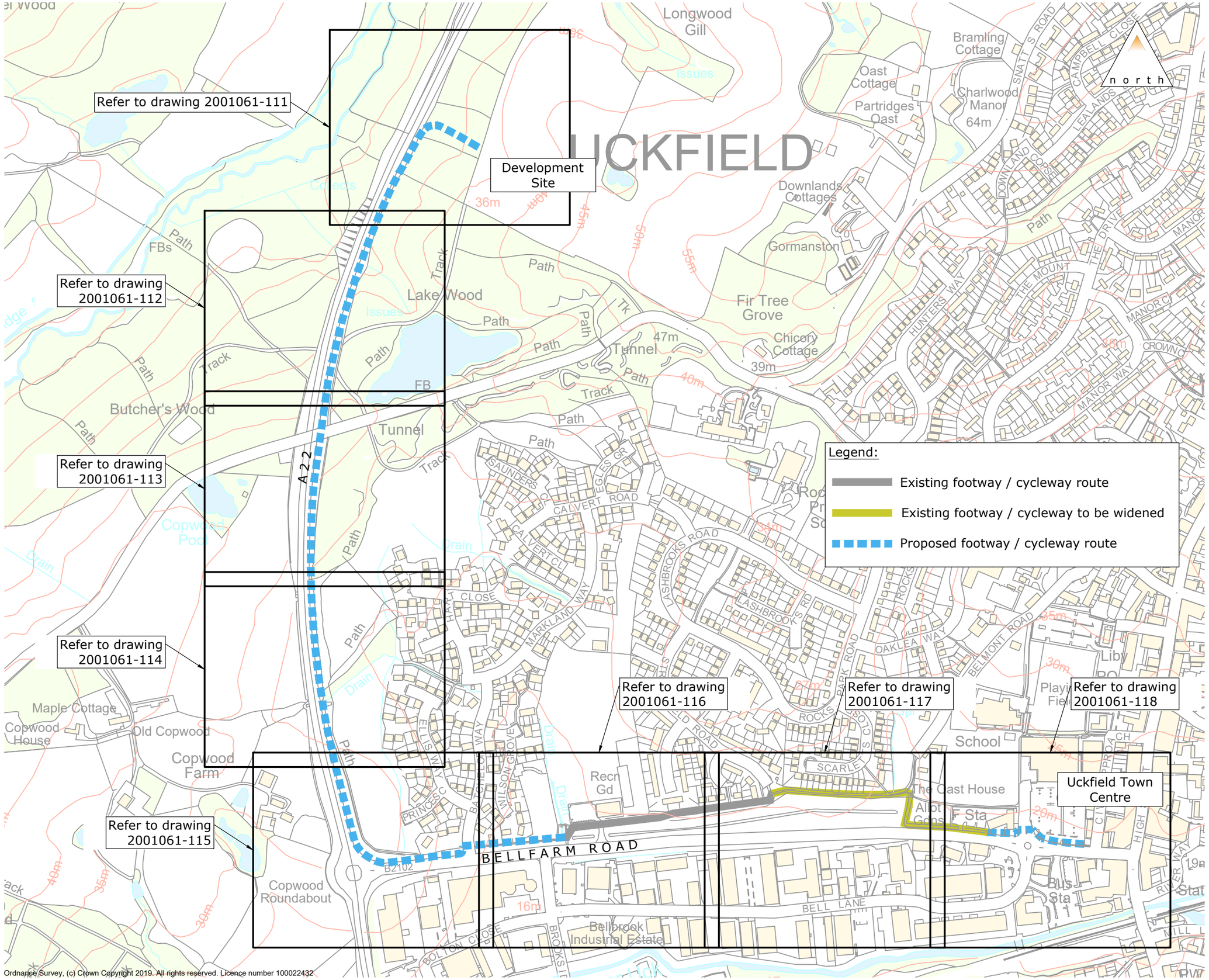
Project:
Downlands Farm, Uckfield

Title:
Proposed SANG Access and Pedestrian Crossing Point

Scale: 1:250 (@ A3)

Drawing: 2001061-107

Revision:



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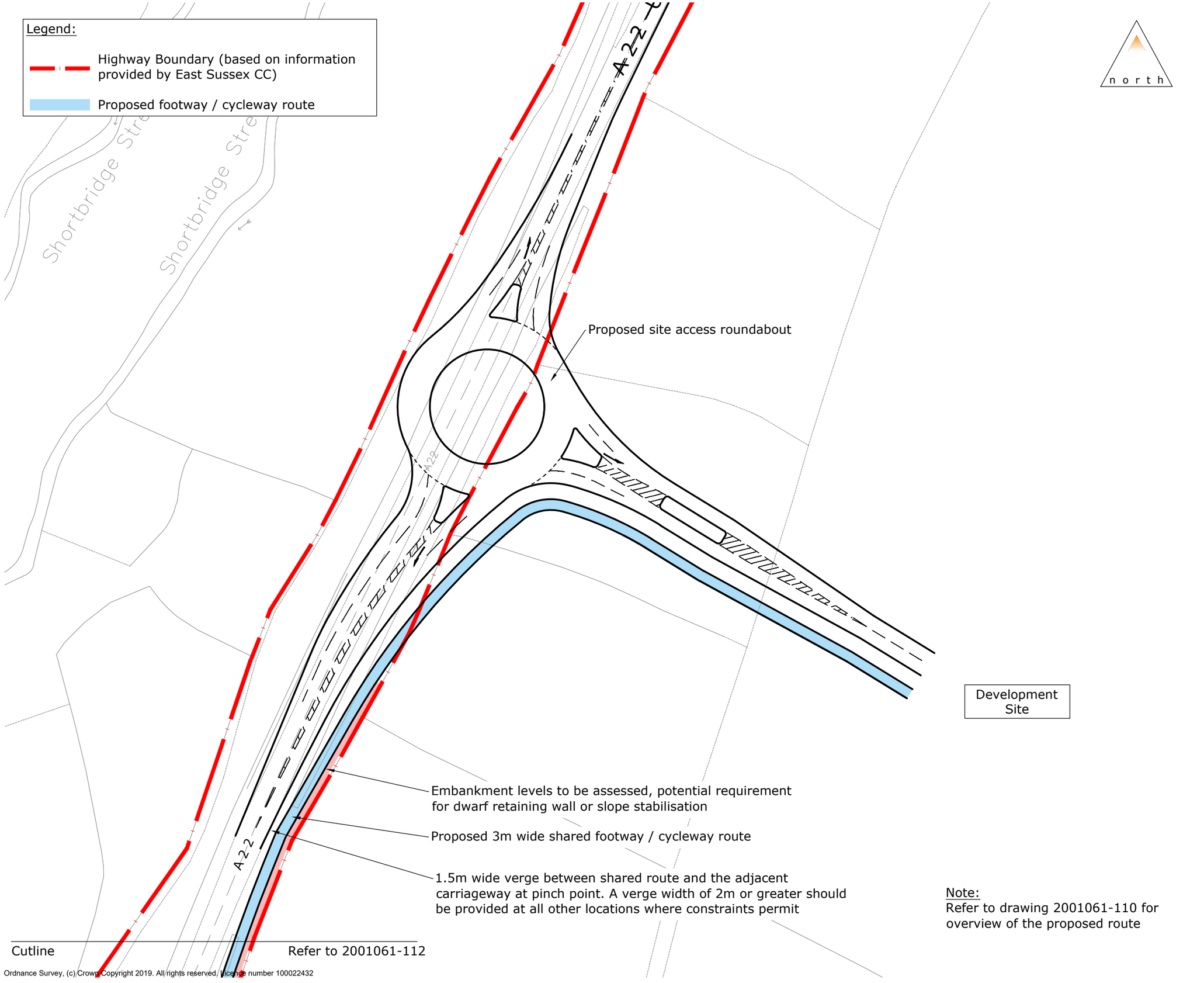
Project:
Downlands Farm, Uckfield

Title:
Overview of Proposed Shared Footway / Cycleway Route

Scale: 1:5,000 (@ A3)

Drawing: 2001061-110

Revision:



Note:
Refer to drawing 2001061-110 for overview of the proposed route

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Project:
Downlands Farm, Uckfield

Title:
Proposed Shared Footway / Cycleway Route

Scale: 1:1,000 (@ A3)

Drawing: 2001061-111

Revision: B

C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-110, 111b, 112a, 113a, 114a, 115a, 116 [Ped-Cycle-Route].dwg

Legend:

- Highway Boundary (based on information provided by East Sussex CC)
- Proposed footway / cycleway route
- Embankment levels to be assessed, potential requirement for dwarf retaining wall or slope stabilisation

Cutline

Refer to 2001061-111

n o r t h

A22

Lake Wood

Embankment levels to be assessed, potential requirement for dwarf retaining wall or slope stabilisation

Proposed 3m wide shared footway / cycleway route

Verge width of 2m or greater should be provided between the shared route and the adjacent carriageway (where constraints permit)

Track

Path (um)

Lake

Path (um)

Note:
Refer to drawing 2001061-110 for overview of the proposed route

Cutline

Refer to 2001061-113

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Project:
Downlands Farm, Uckfield

Title:
Proposed Shared Footway / Cycleway Route

Scale: 1:1,000 (@ A3)

Drawing: 2001061-112

Revision: A

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Cutline

Refer to 2001061-112

Proposed 3m wide shared footway / cycleway route narrows to 2m wide on approach to overbridge

n o r t h

A

A

ROCKS ROAD

Proposed 2m wide shared footway / cycleway route at overbridge (to be located behind the repositioned VRS barrier - with clearance from the VRS working width)

Existing Vehicle Restraint System (VRS) barrier to be relocated at a set back distance of 1.2m from carriageway, proposed footway / cycleway to be located behind the repositioned VRS barrier (with clearance from the VRS working width)

A22

Copwood Pool

Proposed 3m wide shared footway / cycleway route narrows to 2m wide on approach to overbridge

B

B

Embankment levels to be assessed, potential requirement for dwarf retaining wall or slope stabilisation

Proposed 3m wide shared footway / cycleway route

Verge width of 2m or greater should be provided between the shared route and the adjacent carriageway (where constraints permit)

Legend:

- Highway Boundary (based on information provided by East Sussex CC)
- Proposed footway / cycleway route
- Embankment levels to be assessed, potential requirement for dwarf retaining wall or slope stabilisation
- Vehicle Restraint System (VRS) barrier with indicative working width margin

Cutline

Refer to 2001061-114

Notes:

1. Refer to drawing 2001061-110 for overview of the proposed route.
2. Refer to drawings 2001061-119 and 2001061-120 for indicative cross sections 'A-A' and 'B-B'.

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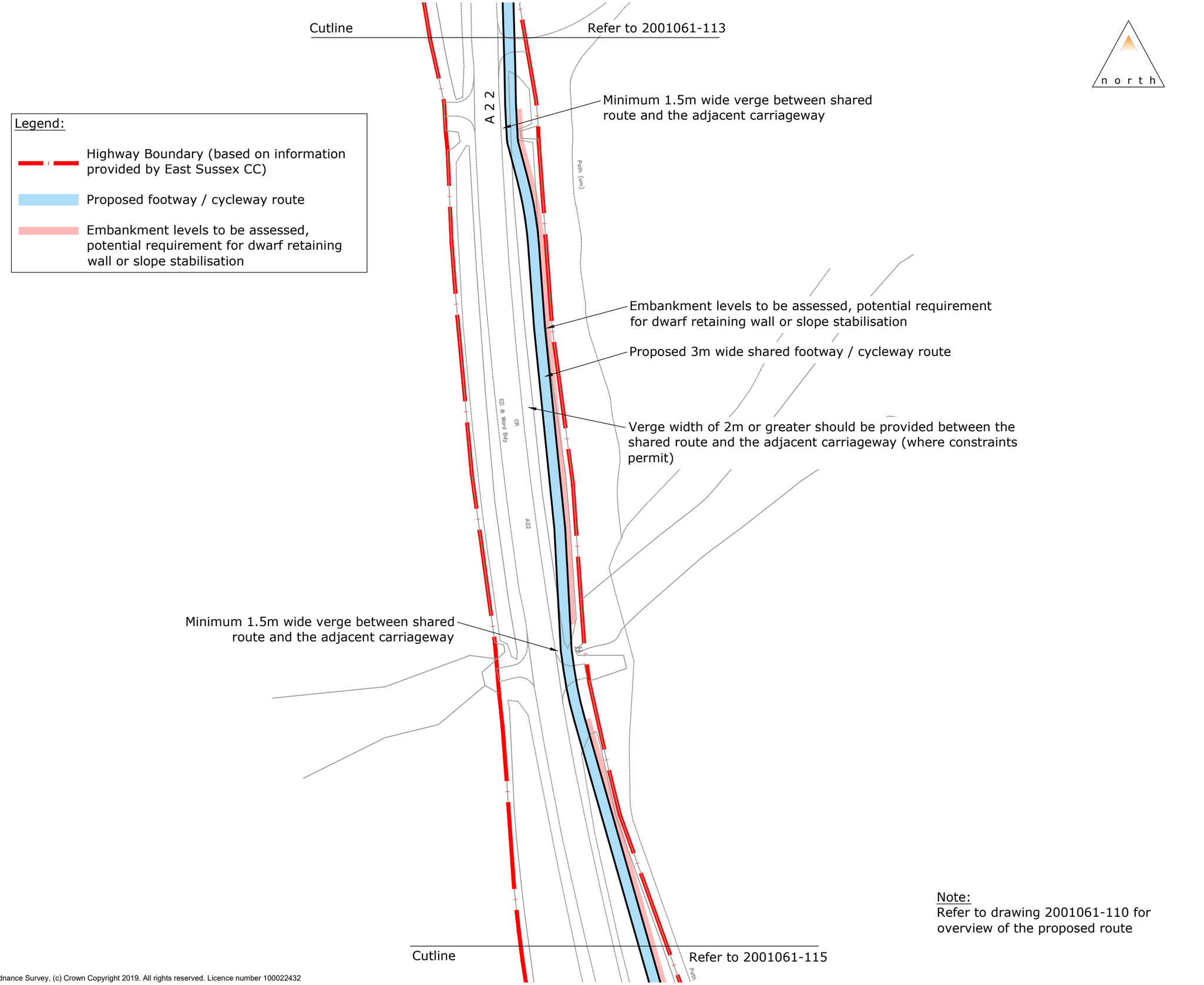
Project:
Downlands Farm, Uckfield

Title:
Proposed Shared Footway / Cycleway Route

Scale: 1:1,000 (@ A3)

Drawing: 2001061-113

Revision: A



Legend:

- Highway Boundary (based on information provided by East Sussex CC)
- Proposed footway / cycleway route
- Embankment levels to be assessed, potential requirement for dwarf retaining wall or slope stabilisation

Note:
Refer to drawing 2001061-110 for overview of the proposed route

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Project:
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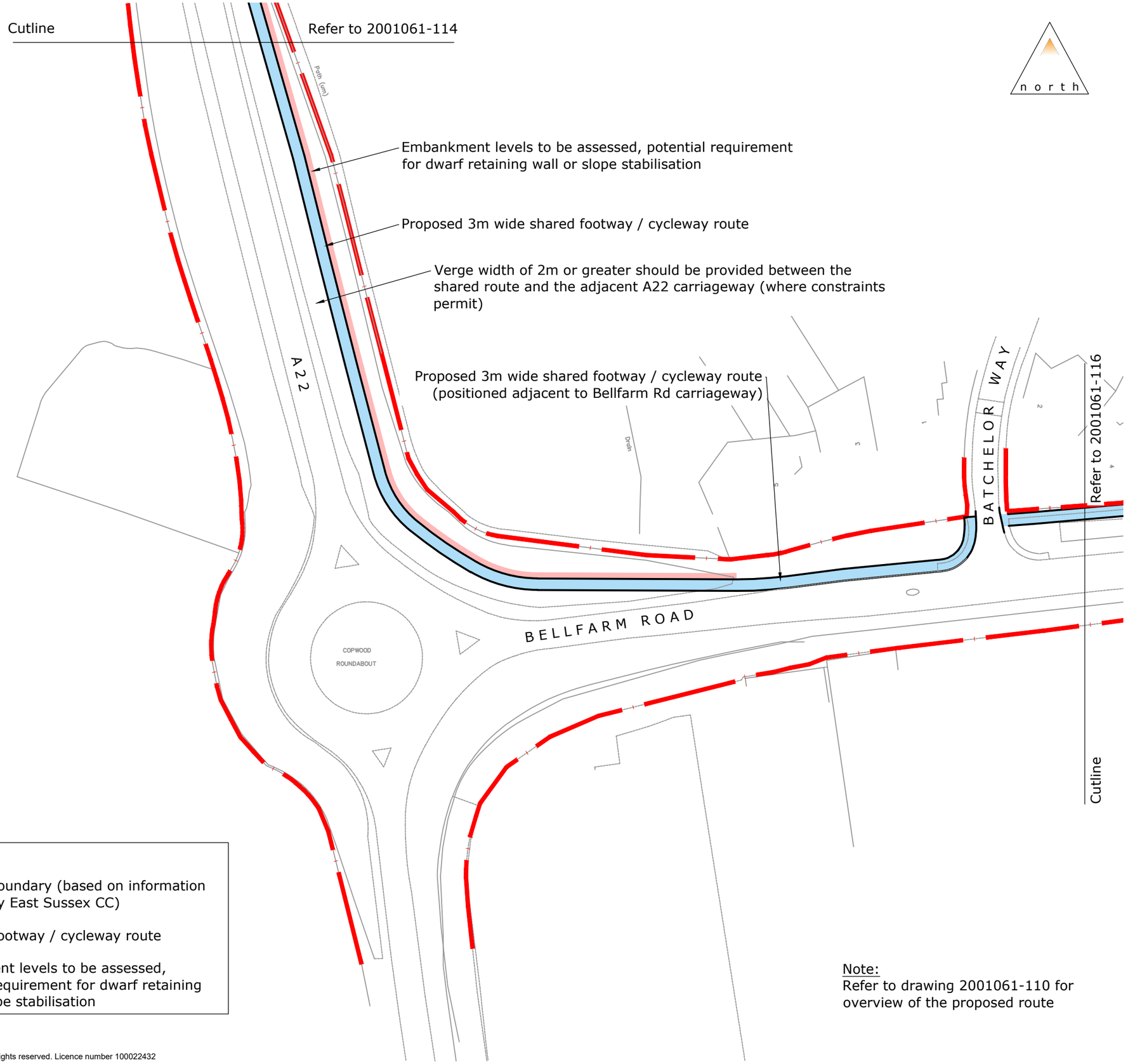
Title:
Proposed Shared Footway / Cycleway Route

Scale: 1:1,000 (@ A3)

Drawing: 2001061-114

Revision: A

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Legend:

- Highway Boundary (based on information provided by East Sussex CC)
- Proposed footway / cycleway route
- Embankment levels to be assessed, potential requirement for dwarf retaining wall or slope stabilisation

Note:
Refer to drawing 2001061-110 for overview of the proposed route

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Project:
Downlands Farm, Uckfield

Title:
Proposed Shared Footway / Cycleway Route

Scale: 1:1,000 (@ A3)

Drawing: 2001061-115

Revision: A

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Legend:

- Highway Boundary (based on information provided by East Sussex CC)
- Proposed footway / cycleway route
- Existing footway / cycleway route

n o r t h

Existing 3m wide shared footway / cycleway route continues towards town centre

Refer to 2001061-117

Existing culvert to be extended and land to be raised to accomodate continuation of proposed 3m wide shared footway / cycleway route

Refer to 2001061-115

Surgery

Drain

C

BELLFARM ROAD

C

Cutline

Proposed 3m wide shared footway / cycleway route to join existing 3m width footway / cycleway

Existing 1.5m wide footway to be widened to form 3m wide shared footway / cycleway route (impact on tree roots to be assessed, no dig construction type potentially required)

Cutline

Notes:

1. Refer to drawing 2001061-110 for overview of the proposed route.
2. Refer to drawing 2001061-120 for indicative cross section 'C-C'.

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Project:
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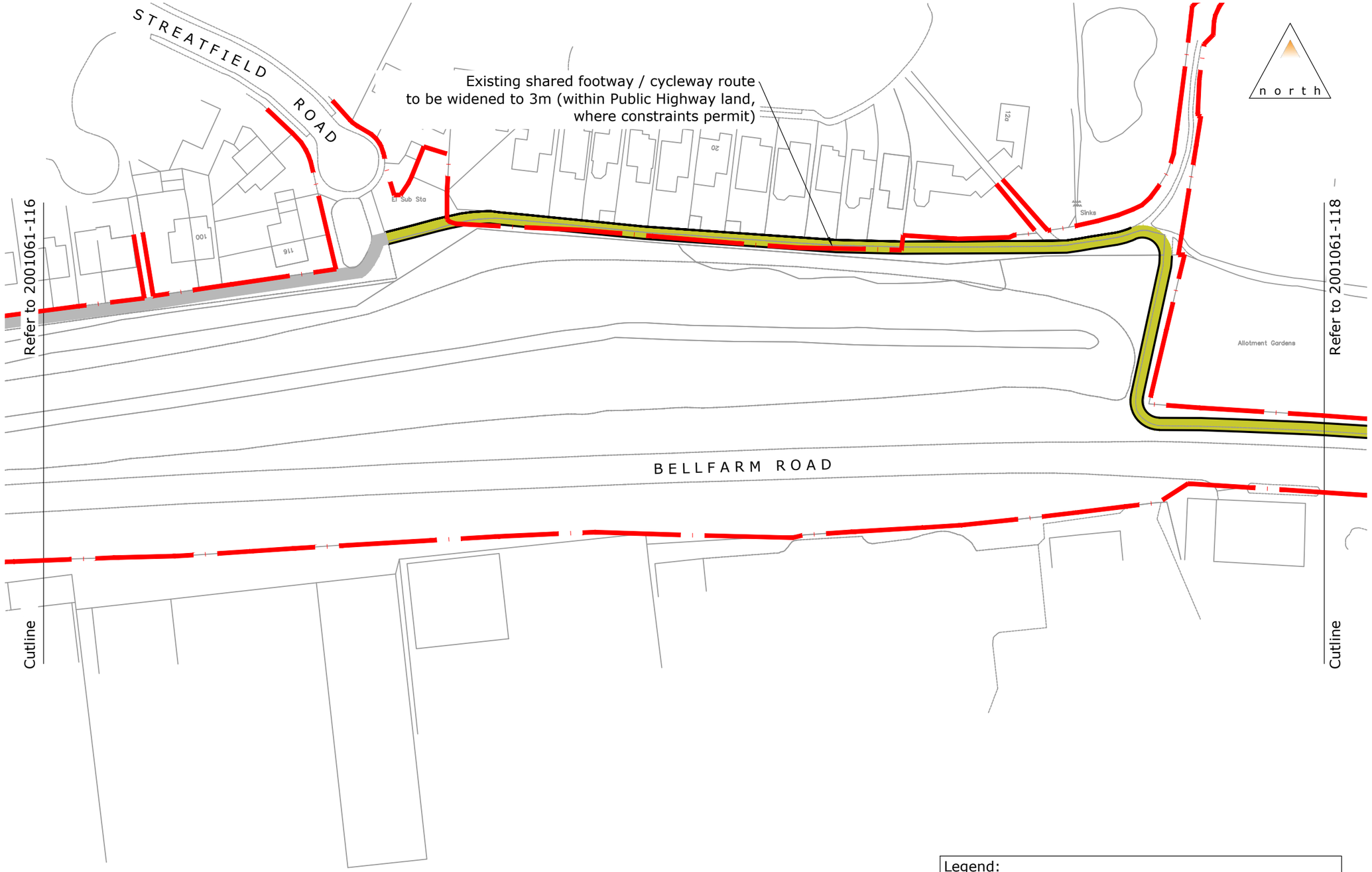
Title:
Proposed Shared Footway / Cycleway Route

Scale: 1:1,000 (@ A3)

Drawing: 2001061-116

Revision:

C:\Users\JulianSmith\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-110 [Ped-Cycle-Route].dwg



Legend:

- Highway Boundary (based on information provided by East Sussex CC)
- Existing footway / cycleway route
- Existing footway / cycleway route to be widened to 3m (within Public Highway land, where constraints permit)

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Project:
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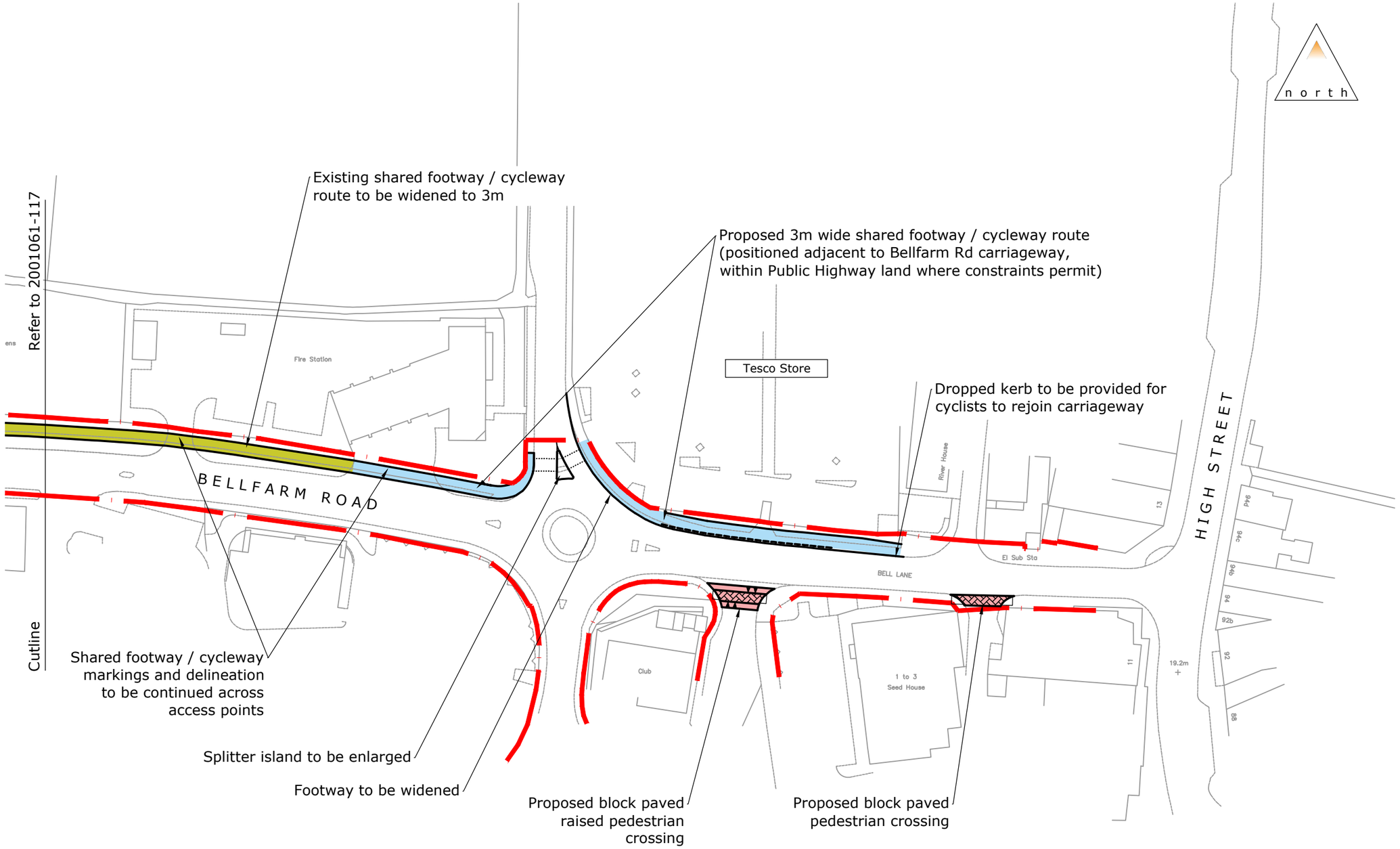
Title:
Proposed Shared
Footway / Cycleway Route

Scale: 1:1,000 (@ A3)

Drawing: 2001061-117

Revision: A

C:\Users\Julian - Work\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-117a, 118 [Ped-Cycle-Route].dwg



Legend:

- Highway Boundary (based on information provided by East Sussex CC)
- Proposed footway / cycleway route
- Existing footway / cycleway route
- Existing footway / cycleway route to be widened to 3m (within Public Highway land, where constraints permit)

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Project:
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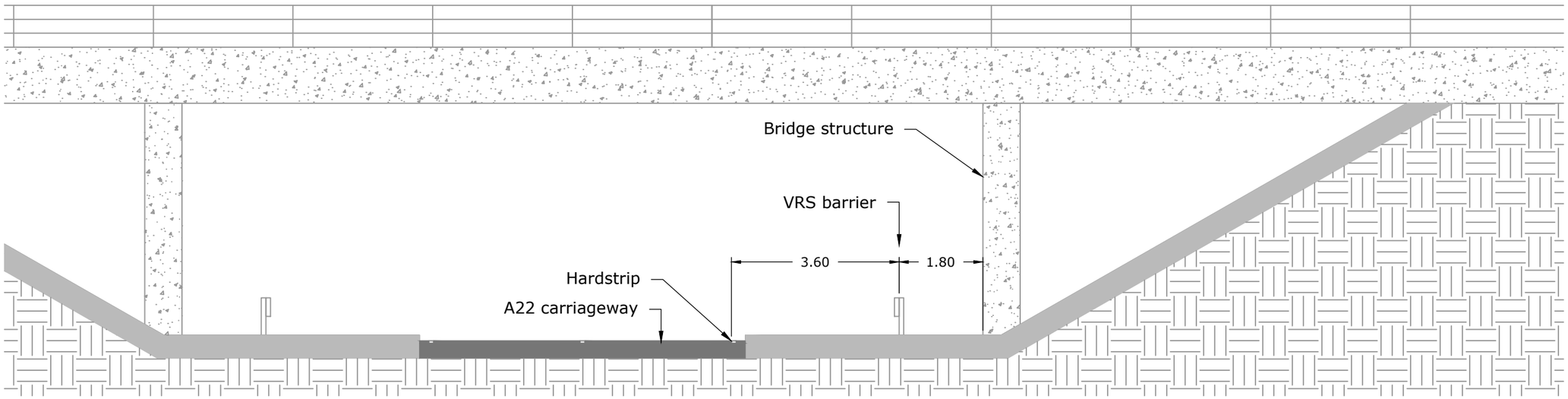
Title:
Proposed Shared Footway / Cycleway Route

Scale: 1:1,000 (@ A3)

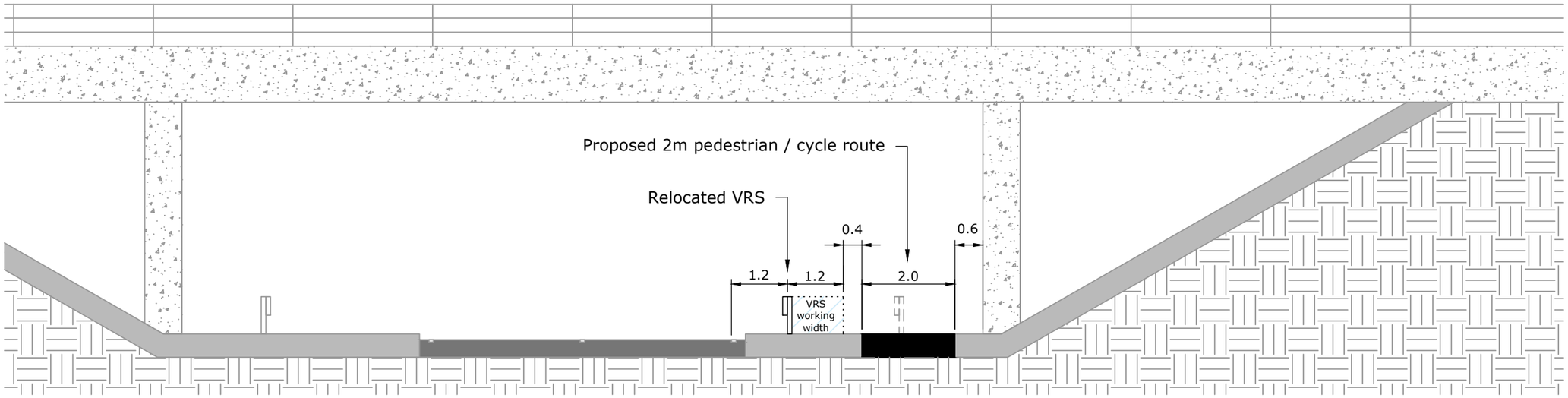
Drawing: 2001061-118

Revision:

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Indicative Cross-Section A-A
Existing Arrangement



Indicative Cross-Section A-A
Proposed Arrangement

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Project:
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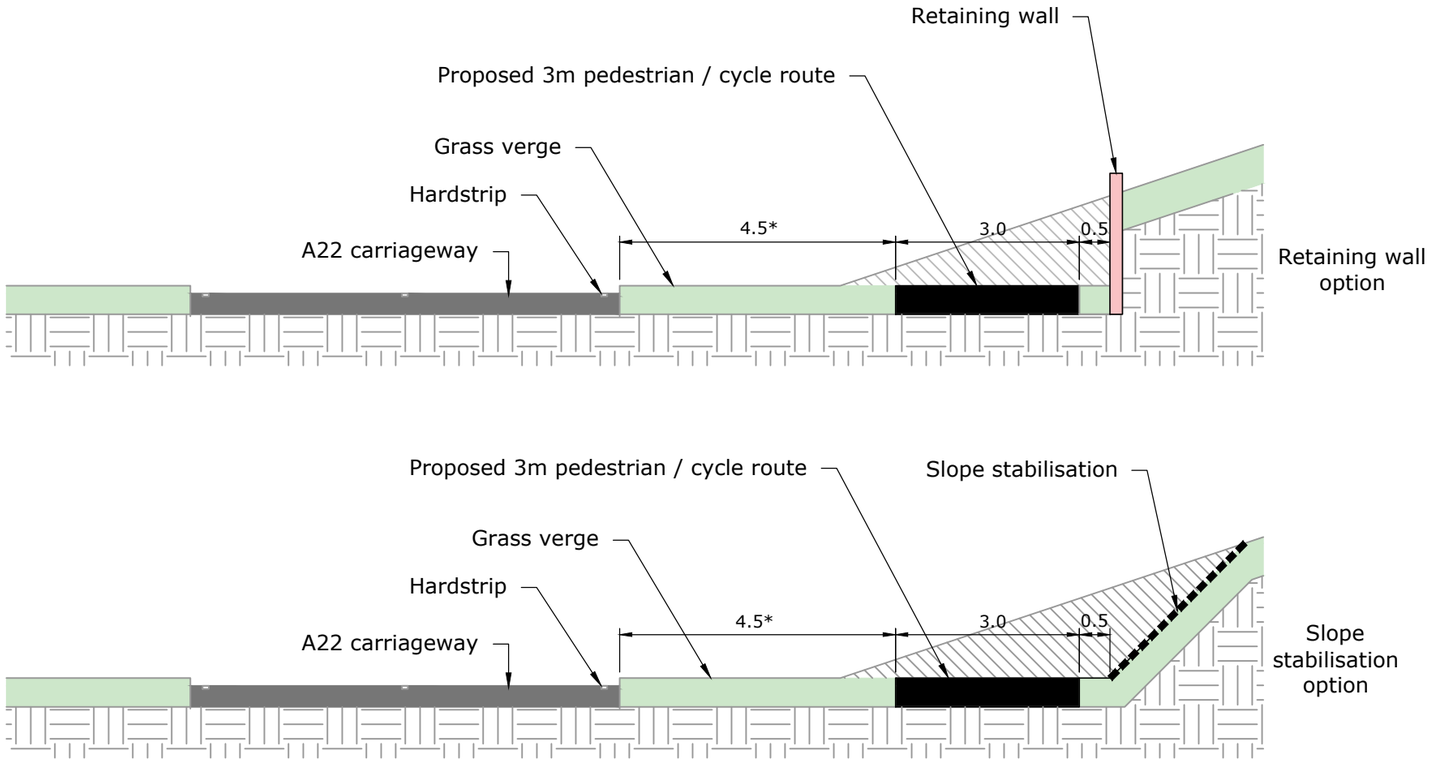
Title:
Footway / Cycleway Route
Indicative Cross Sections

Scale: 1:100 (@ A3)

Drawing: 2001061-119

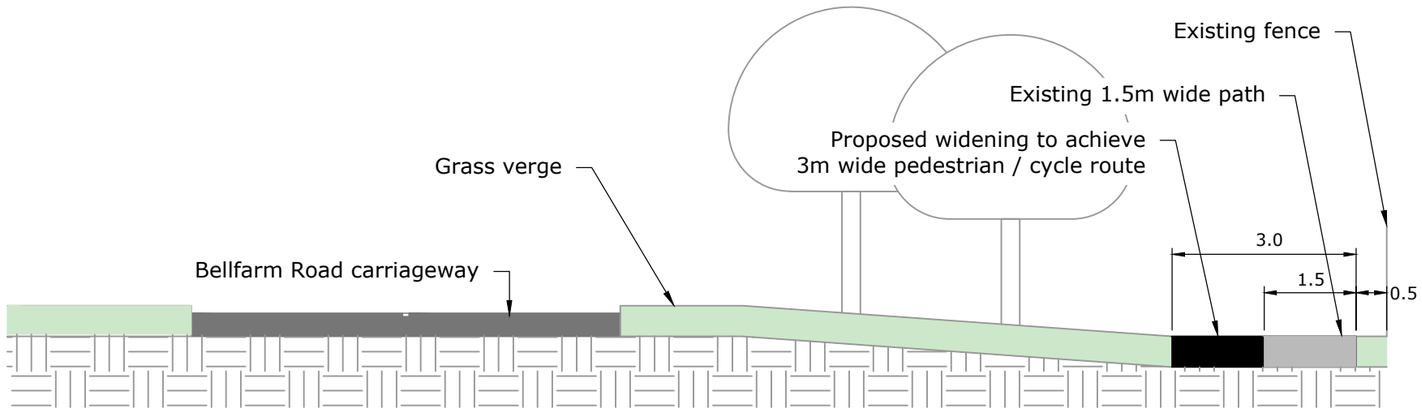
Revision:

D:\SHAREPOINT\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-119.dwg



* Shared footway / cycleway route to be set as far back from carriageway as can be reasonably achieved within the site constraints. Minimum verge width to be 1.5m.

Indicative Cross-Section B-B
Proposed Retaining Wall and Slope Stabilisation Arrangement Options



Indicative Cross-Section C-C
Proposed Widening of Existing Path

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Title:
Footway / Cycleway Route
Indicative Cross Sections

Scale: 1:100 (@ A3)

Drawing: 2001061-120

Revision:

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C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-130a [Rocks Rd Overview Plan].dwg

Legend:

- Existing footway to be resurfaced
- Existing footway to be widened
- Proposed / improved pedestrian crossing points
- Proposed footway / cycleway ramped route
- Proposed footway stepped route
- Proposed footway / cycleway boardwalk route

Development Site

Route across Fir Tree Grove and Ancient Woodland, refer to drawings:
2001061-135 Overview of Route at Fir Tree Grove and Ancient Woodland
2001061-136 Ramp and steps
2001061-137 Boardwalk
2001061-138 Ramp Long Section
2001061-139 Ramp Cross Sections
2001061-140 Fir Tree Grove Cut / Fill Feasibility Model

Refer to drawing 2001061-131

Refer to drawing 2001061-132

Refer to drawing 2001061-133

Refer to drawing 2001061-134

Uckfield Town Centre

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Project:
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Title:
Overview of Proposed Works
Rocks Road and Church Street

Scale: 1:5,000 (@ A3)

Drawing: 2001061-130

Revision: A

Proposed boardwalk link to development site

Guardrail to be installed adjacent to level drops

Proposed steps

Proposed ramp
(maximum gradient 8%)

Guardrail
(Visirail or similar)

Kerb to be re-aligned

Pedestrian crossing 59 metre
visibility splay

60mph

30mph

Change in speed limit to be relocated
approximately 140 metres northwestwards
from its current location

Existing footway to be widened to 2m

Kerb to be re-aligned to provide
5.5m wide carriageway

Proposed traffic calming / priority build-out

Note: Steps and ramps to be installed with handrails /
parapets where adjacent to a drop in level

SNATTS ROAD

ROCKS ROAD

The
Granary

Hunters
Pit

Cutline - refer to 2001061-132

north

Legend:

- Indicative highway boundary
- Ancient Woodland boundary
- Ancient Woodland 15 metre buffer zone
- Pedestrian / cycleway route, boardwalk construction
- Pedestrian / cycleway route, ramped path
- Pedestrian route, stepped path
- Existing footway to be widened to 2m

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Project:
Downlands Farm, Uckfield

Title:
Proposed Works on Rocks Rd and Church St (sheet 1 of 4)

Scale: 1:500 (@ A3)

Drawing: 2001061-131

Revision: E

C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-131E, 132A, 133A, 134A [Rocks Road Route C].dwg

C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-131D, 132A, 133A, 134A [Rocks Road Route C].dwg

Existing speed limit signage to be removed (change in speed limit to 60mph derestricted for northwest bound traffic is to be relocated to a position approximately 140m to the northwest of its current location)

Cutline - refer to 2001061-131

Footway to be widened to 2m

Kerb to be re-aligned to provide 5.5m wide carriageway

Kerb to be re-aligned

Footway to be widened to 2m

HUNTERS WAY

ROCKS ROAD

ROCKS PARK ROAD

Rocks Road

Rocks Park Road

Footway to be widened to 2m

Cutline - refer to 2001061-133

2a

2b

Baker

n o r t h

Legend:

Indicative highway boundary

Existing footway to be widened to 2m

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Project:
Downlands Farm, Uckfield

Title:
Proposed Works on Rocks Rd and Church St (sheet 2 of 4)

Scale: 1:500 (@ A3)

Drawing: 2001061-132

Revision: A

C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-131D, 132A, 133A, 134A [Rocks Road Route C].dwg



Legend:

- Indicative highway boundary
- Existing footway to be widened to 2m
- Existing footway to be resurfaced

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Project:
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Title:
Proposed Works on Rocks Rd and Church St (sheet 3 of 4)

Scale: 1:500 (@ A3)

Drawing: 2001061-133

Revision: A

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C:\Users\Julian - Work\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-131E, 132A, 133A, 134B [Rocks Road Route C].dwg

Existing footway to be resurfaced

Cutline - refer to 2001061-133

Proposed traffic calming / priority build-out

Footway to be widened to 3m

Existing footway to be resurfaced

Junction radii to be reduced and footway to be widened

Proposed dropped kerb pedestrian crossing point with tactile paving

PUDDING LANE

REGENCY CLOSE

CHURCH STREET

CHURCH WALK

BELMONT ROAD

HIGH STREET

Cottage

Lych Gate

Meml

Fig Tree Cott

Andertons

Old Bakery Cottage

Mermaid House

The Tab

50

48

21

19

17

15

16

14

10

2

1

6

7

5

85

89

87

91a

91b

3

4

6

n o r t h

Legend:

- Indicative highway boundary
- Existing footway to be widened
- Existing footway to be resurfaced

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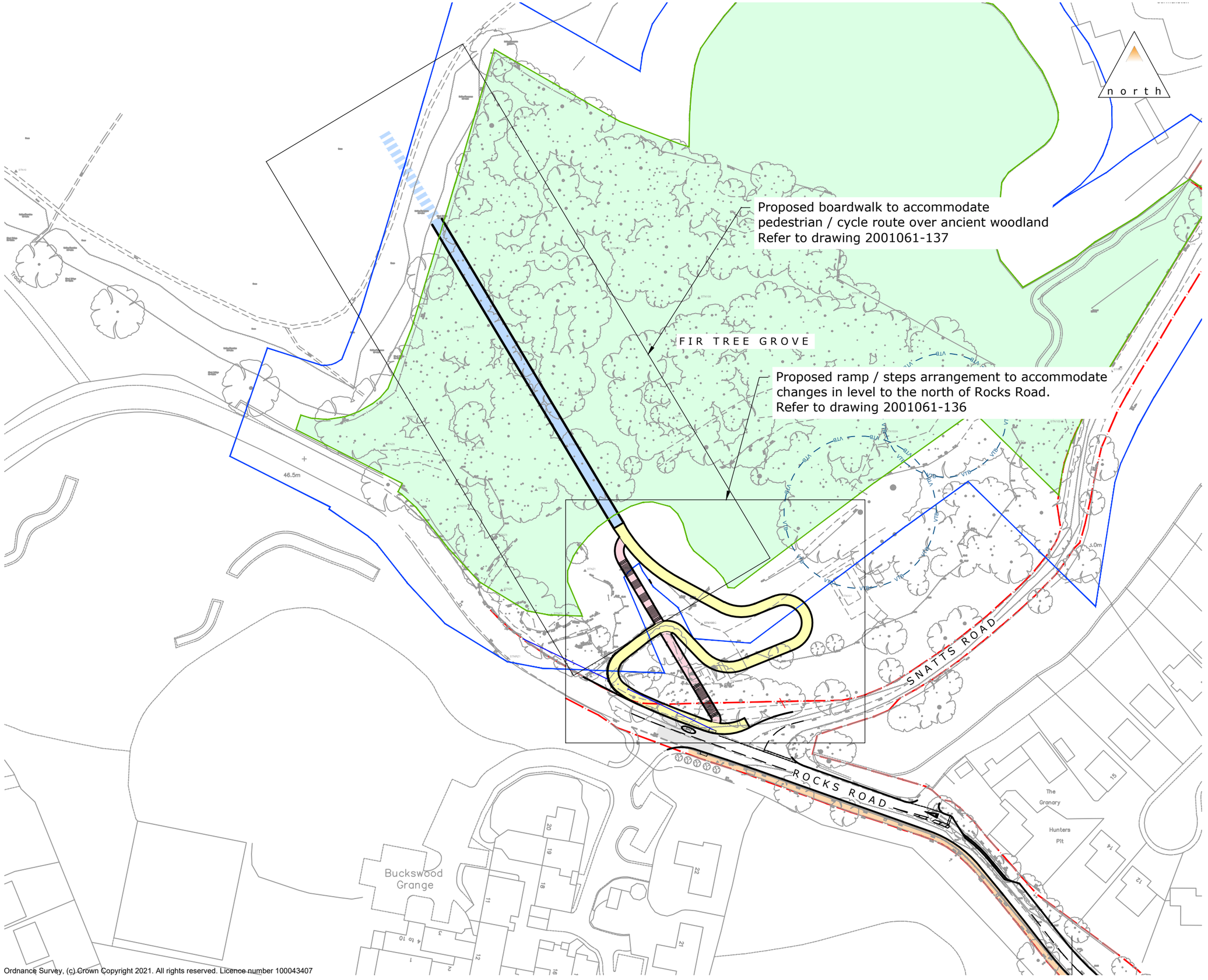
Project:
Downlands Farm, Uckfield

Title:
Proposed Works on Rocks Rd and Church St (sheet 4 of 4)

Scale: 1:500 (@ A3)

Drawing: 2001061-134

Revision: B



Legend:

- Indicative highway boundary
- Ancient Woodland
- Ancient Woodland 15 metre buffer zone
- Pedestrian / cycleway route, boardwalk construction
- Pedestrian / cycleway route, ramped path
- Pedestrian route, stepped path
- Existing footway to be widened to 2m

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Project:
Downlands Farm, Uckfield

Title:
Overview of Fir Tree Grove Pedestrian / Cycle Route

Scale: 1:1,000 (@ A3)

Drawing: 2001061-135 Revision: E

C:\Users\Julian - Work\OneDrive - Motion\gluckf 2001061\Drawings\2001061-135e [Fir Tree Grove Overview].dwg

Proposed ramped path (maximum gradient 8%) to accommodate changes in level at Fir Tree Grove. Refer to drawings 2001061-138, 2001061-139 and 2001061-140 for long section, cross sections and cut/fill earthworks feasibility model

Proposed steps arrangement to accommodate changes in level at Fir Tree Grove

Note: Steps and ramps to be installed with handrails / parapets where adjacent to a drop in level

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Legend:

- Indicative highway boundary
- Ancient Woodland boundary
- Ancient Woodland 15 metre buffer zone
- Pedestrian / cycleway route, boardwalk construction
- Pedestrian / cycleway route, ramped path
- Pedestrian route, stepped path
- Indicative extent of earthworks
- 49.0 Proposed levels

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Project:
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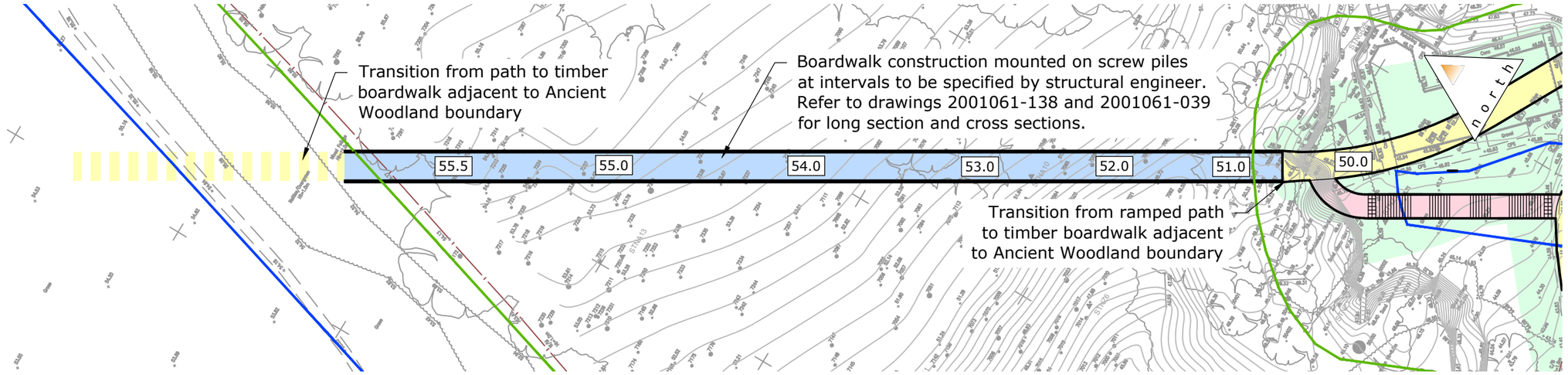
Title:
Fir Tree Grove, Proposed Ramp / Steps Arrangement

Scale: 1:250 (@ A3)

Drawing: 2001061-136

Revision: B

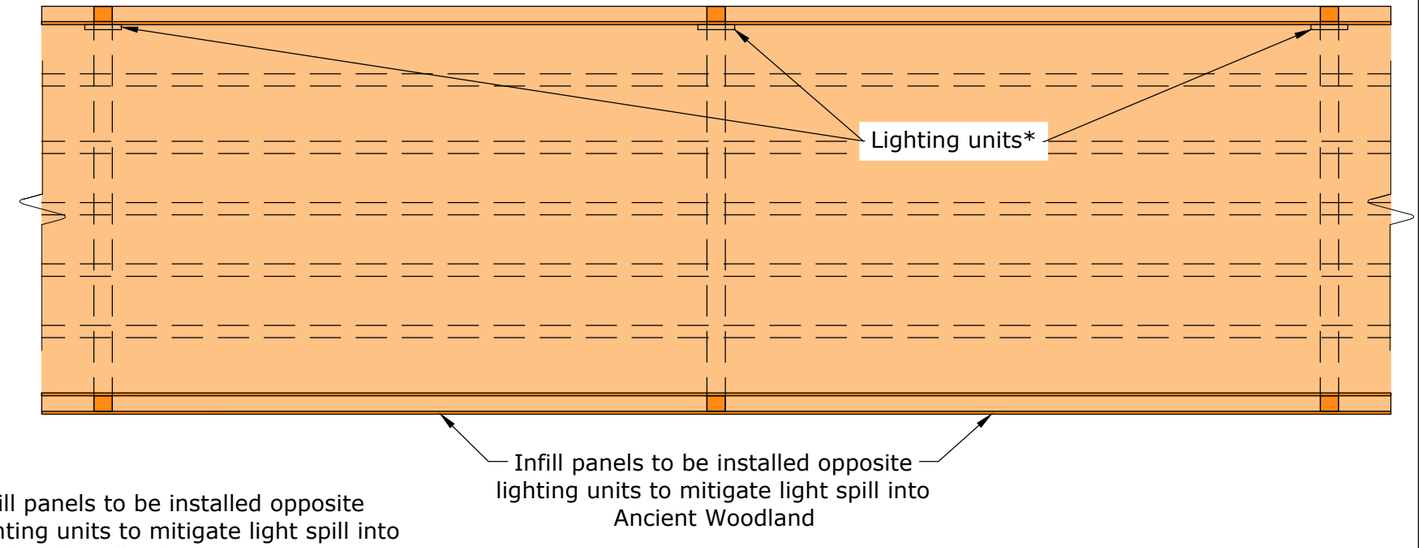
C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-136b [FTG Ramp & Steps].dwg



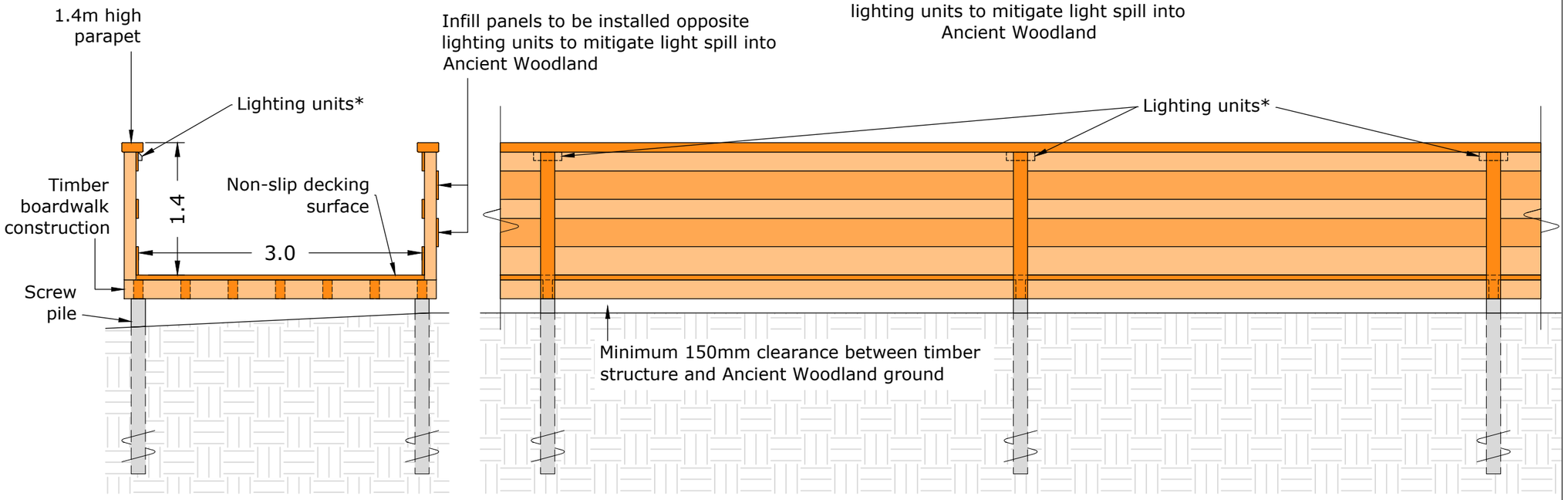
Legend:

- Ancient Woodland boundary
- Pedestrian / cycleway route, boardwalk construction
- Pedestrian / cycleway route, ramped path
- Indicative extent of earthworks
- 53.0 Proposed levels

Indicative Detail for Timber Boardwalk Construction
(Scale 1:20)



* Lighting units to be Garda anti-climb (or similar approved), specified and installed in accordance with The Lighting Bee Ltd specification



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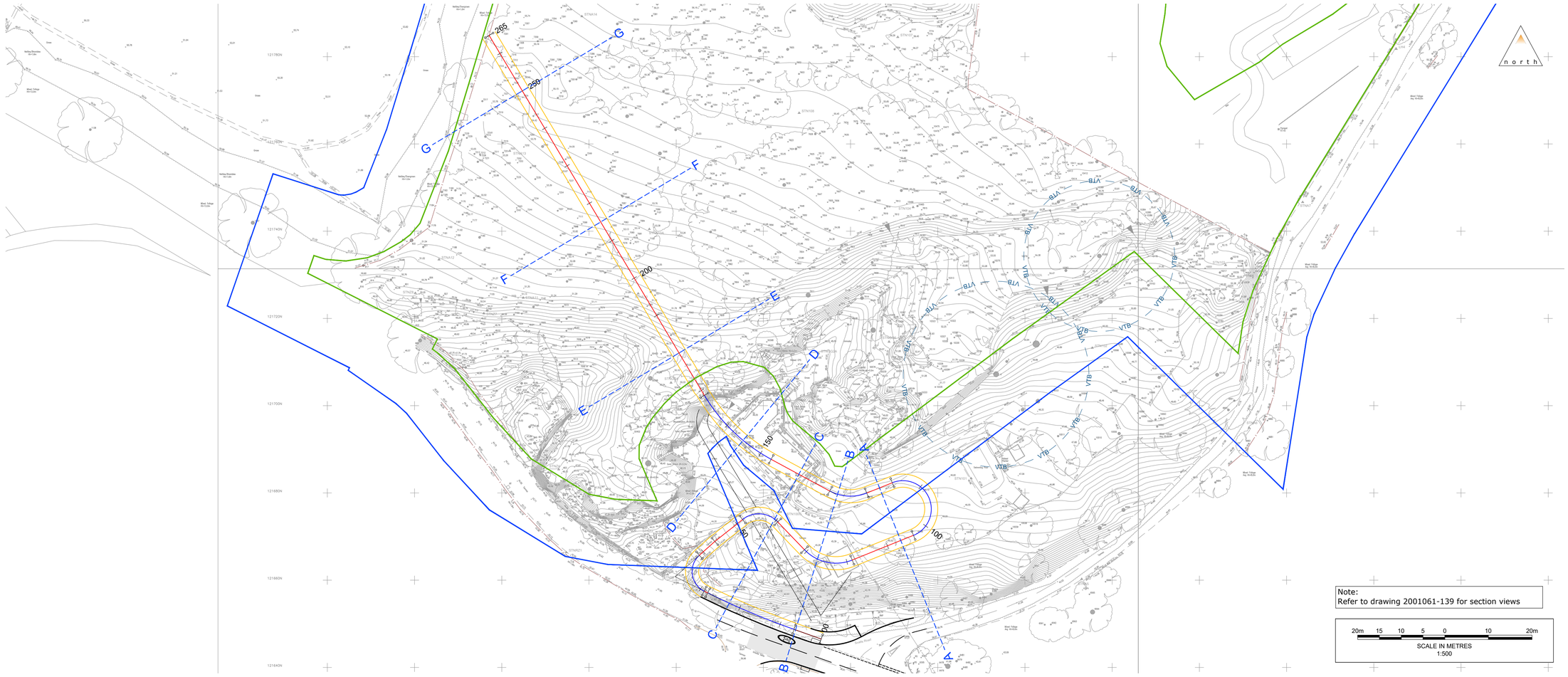
Project:
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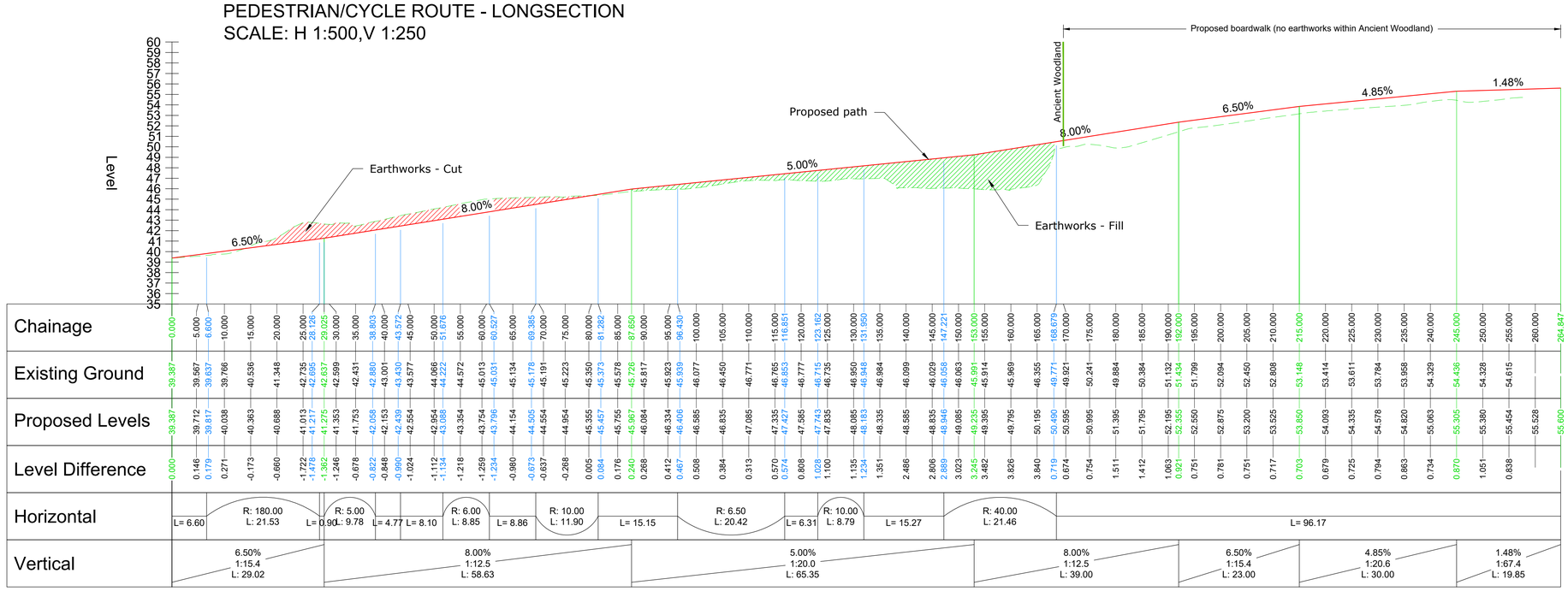
Title:
Fir Tree Grove
Proposed Boardwalk

Scale: 1:500 (@ A3)

Drawing: 2001061-137
Revision: B

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Revision Notes: | Drn | Chk | App | Date

Drawing Status:

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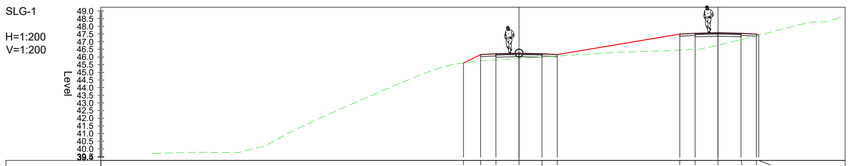
Client:
Gleeson Land

Project:
Downlands Farm, Uckfield

Title:
Pedestrian / Cyclist Route
Long Section

Scale: As Shown | Size: A1 | Project No: 2001061

Drawing: 2001061-138 | Revision:


SLG-1
H=1:200
V=1:200
Level (m)

| | | |

CUT AND FILL VOLUMES

NUMBER	MINIMUM LEVEL	MAXIMUM LEVEL	COLOUR	AREA	VOLUME
1	-2.50	-2.00		23.859m2	1.306m3
2	-2.00	-1.50		164.057m2	52.183m3
3	-1.50	-1.00		297.894m2	173.524m3
4	-1.00	-0.50		174.963m2	289.210m3
5	-0.50	0.00		169.226m2	368.207m3
6	0.00	0.50		451.154m2	469.539m3
7	0.50	1.00		198.574m2	306.022m3
8	1.00	1.50		162.726m2	221.077m3
9	1.50	2.00		77.544m2	158.739m3
10	2.00	2.50		71.835m2	126.255m3
11	2.50	3.00		84.315m2	85.169m3
12	3.00	3.50		52.958m2	49.952m3
13	3.50	4.00		52.572m2	23.241m3
14	4.00	4.50		22.593m2	4.128m3
TOTAL CUT					884.431 m^3
TOTAL FILL					1444.121 m^3

Legend

- Existing Ground Profile
- Ancient Woodland Boundary
- Ancient Woodland 15m Buffer Zone
- VTB — Veteran Tree Boundary

Note:
Refer to drawing 2001061-139 for section views

SCALE IN METRES
1:200

Revision Notes: | Drn | Chk | App | Date

Drawing Status:

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Client:
Gleeson Land

Project:
Downlands Farm, Uckfield

Title:
Pedestrian / Cyclist Route
Earthworks cut/fill feasibility model

Scale: 1:200 | Size: A1 | Project No: 2001061

Drawing: 2001061-140 | Revision:

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Appendix F

Stage 1 Road Safety Audit & Designer's Response

LAND AT DOWNLANDS FARM, UCKFIELD

Proposed Access, Pedestrian and Cyclist Improvements

Stage 1 Road Safety Audit
Requested by Motion

April 2022

Gateway TSP

Road Safety Engineering

Project:	Land at Downlands Farm, Uckfield Proposed Access, Pedestrian and Cyclist Improvements
Client:	Motion
Document:	Stage 1 Road Safety Audit
Gateway TSP ref:	SG/WP/2001061 RSA1 v3.1
Issue date:	27th April 2022
Status:	Issued as v3.1
Authorised by:	SG

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Road Safety Engineering

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CONTENTS

1 Introduction 1

2 Items Considered by this Road Safety Audit 3

3 Previous Road Safety Audit 4

4 Collision Data 5

5 Problems Identified by this Road Safety Audit 6

6 Audit Team Statement 11

Appendices

Appendix A: Location Plan(s)

1 INTRODUCTION

1.1 This report describes a Stage 1 Road Safety Audit (RSA) of highway works associated with a residential development on the west side of Uckfield, in East Sussex. The proposed development is to provide approximately 550 dwellings and this audit considers the following proposed works:

- New site access from A22, approximately 450m north of Rocks Road overbridge
- Emergency access (priority junction) north of main access
- Vehicle and pedestrian access to a SANG car park
- Footway along Snatts Road
- Improvements to public footpath connecting Snatts Road and Pudding Cake Lane
- Proposed pedestrian and cyclist improvements on Rocks Road, Church Street, London Road and Bellfarm Road

1.2 The principal site access will be by means of a new roundabout on the A22, approximately 450 metres north of the Rocks Road overbridge. An emergency access is also to be provided north of the main access roundabout, in the form of a simple priority junction within the A22 southbound layby. This section of the A22 is of single carriageway configuration and subject to the national speed limit of 60mph. It is unlit except at the Copwood Roundabout to the south and the Black Down Roundabout to the north.

1.3 Snatts Road is of single carriageway configuration and subject to a 30mph speed limit at the proposed car park access, turning to derestricted approximately 80 metres to the southwest. There is street lighting within the 30mph speed limit zone, but not the derestricted section. A footway runs along the southeast side of Snatts Road, to where it meets a public footpath connecting with Downland Copse, about 90 metres southwest of the 30mph speed limit. This is the point at which the proposed footway and footpath improvements commence; the proposed footway is to continue the provision along Snatts Road for some 140 metres, providing a link to the proposed development at Downland Farm. The public footpath, which runs generally south/southeast toward the town centre, is to be improved by various means including new steps, repair/upgrade of surfaces, dropped kerbs/tactile paving at road crossings and lighting.

1.4 Rocks Road is derestricted where it meets Snatts Road but is subject to a 30mph limit approximately 130 metres to the south. Further south/east it leads into Church Street, which is narrower and subject to a 20mph speed limit. It is lit and a footway runs along at least one side to High Street.

1.5 This Road Safety Audit was carried out by Steve Giles and Wendy Palmer and consisted of a desktop study and three site visits. For ease of reference, this report is a compilation of three RSAs covering all development proposals.

1.6 The sites of the proposed residential access and Bellfarm cycle improvements were visited on Friday 16th October 2020, between the hours of 10:30 and 11:30, and again on Tuesday 14th December 2021 between the hours of 10:00 and 11:15. The proposed SANG car park access and footpath/ footway improvements were visited on Wednesday 2nd December 2020, between the hours of 11:00 and 13:00. The site visit for the Rocks Road, Church Street and London Road improvements was undertaken on Tuesday 14th December 2021 between the hours of 11:30and 13:00. At the time of all three site visits the weather was overcast and the road surface dry. Traffic flows at the time of the site visit were light to moderate and speeds were judged to be generally within the speed limits.

1.7 The terms of reference for this RSA are as described in the Design Manual for Roads and Bridges (DMRB) document GG119. The Audit Team is independent of the project design team and has not been involved in the design process in any other capacity. The audit considers only the potential road safety implications of the scheme and has not verified compliance of the design with any other criteria.

1.8 The Audit Team has not been made aware of any Departures from Standard. Whilst reference may be made to design standards, this report is not intended to provide a design check.

1.9 Recommendations are aimed at addressing the identified potential road safety problems. However, there may be other acceptable ways to overcome a problem, considering wider constraints and opportunities; the Auditors would be pleased to discuss such alternative solutions as appropriate. The recommendations contained herein do not absolve the Designer of his/her responsibilities.

2 ITEMS CONSIDERED BY THIS ROAD SAFETY AUDIT

Document ref.	Rev.	Originator	Title
2001061-100	A	Motion	Overview of Proposed Highway Works
2001061-101	A	Motion	Site Access Roundabout
2001061-102	A	Motion	Proposed Emergency Access
2001061-103	-	Motion	Proposed Footway at Snatts Road
2001061-104	-	Motion	Possible Improvements to Pedestrian Route
2001061-105	-	Motion	Proposed Pedestrian Crossing Point on London Road
2001061-106	-	Motion	Indicative Steps Arrangement
2001061-107	-	Motion	Proposed SANG Access and Pedestrian Crossing Point
2001061-110	-	Motion	Overview of Proposed Shared Footway/ Cycleway Route
2001061-111	A	Motion	Proposed Shared Footway/ Cycleway
2001061-112 to 118	-	Motion	Proposed Shared Footway/ Cycleway
2001061-119 to 120	-	Motion	Footway/ Cycleway Route Indicative Cross Sections
2001061-130	A	Motion	Overview of Proposed Works Rocks Road / Church Street Improvements
2001061-131	D	Motion	Proposed Works on Rocks Road & Church Street Sheet 1
2001061-132 to 134	A	Motion	Proposed Works on Rocks Road & Church Street Sheets 2 to 4

Additional/background information provided to the Audit Team

- None

3 PREVIOUS ROAD SAFETY AUDIT

3.1 Previous road safety audits were undertaken on the proposed SANG car park access and footpath/ footway improvements and the proposed residential access, by Gateway-TSP in December 2020. As noted in the introduction, for ease of reference, this report includes these earlier RSAs and covers all development proposals.

4 COLLISION DATA

4.1 Personal Injury Collision (PIC) information was obtained for the last five years (2016 to 2021) from Crashmap (www.crashmap.co.uk) which reveals that one PIC occurred in Manor Way, close to where the footpath crosses it. It was in fine/dry/daylight conditions and involved a car using a private access and a young child, who was in the carriageway. It resulted in slight injuries to the child.

4.2 One PIC occurred in the vicinity of the proposed access onto the A22. It involved a single southbound car losing control in wet/daylight conditions, resulting in slight injuries to the driver.

4.3 Three further collisions occurred at the Copwood Roundabout, as follows:

i) A two-car 'shunt' on the westbound approach (Bellfarm Road), causing slight injuries to the driver and passenger of the front vehicle (wet/dark)

ii) A single vehicle on the westbound approach (Bellfarm Road) lost control and struck the crash barrier (wet/daylight)

iii) The third was on the A27 north of the roundabout, in fine/dry/daylight conditions, but no other details are available because it was in 2021 hence the record is provisional

5 PROBLEMS IDENTIFIED BY THIS ROAD SAFETY AUDIT

General Matters

5.1 The Audit Team raises no concerns at this Stage 1 RSA in respect of general matters.

Local Alignment

5.2 The Audit Team raises no concerns at this Stage 1 RSA in respect of local alignment.

Junctions

5.3 Problem

Vehicle side-impact collisions due to parallel circulating

Location: Circulatory carriageway of proposed roundabout

The proposed roundabout design incorporates two entry lanes on each arm. Vehicle swept path analysis has not been provided and it is therefore not clear whether two large vehicles will be able to circulate simultaneously. Insufficient circulating carriageway width could lead to side impact collisions.

Recommendation

Carry out vehicle swept path analysis for side-by-side turning movements at the proposed roundabout.

5.4 Problem

Vehicle turning collisions due to obscured junction visibility

Location: Entry to proposed roundabout from development access road and emergency access

The A22 runs through a belt of trees at this location. If sufficient clearance is not carried out, visibility from the development accesses northwards along the A22 could be compromised, leading to collisions between vehicles joining the A22 from the development and those travelling south.

Recommendation

Carry out sufficient clearance of trees and foliage to provide adequate visibility at both junctions and to ensure that visibility will not be compromised in future due to re-growth.

Walking, Cycling and Horse Riding

5.5 Problem

Pedestrian injuries due to trips/falls or collisions with passing vehicles

Location: Proposed footway on Snatts Road

The new footway runs along an unlit section of Snatts Road where the verge is uneven and accommodates a drainage ditch/brambles. Pedestrians could stray from the footway and trip/fall into the ditch/bramble, or into the carriageway where they may collide with passing vehicles.

Recommendation

An edge restraint should be provided along the back of the new footway and the street lighting extended along its length.

5.6 Problem

Pedestrian injuries due to trips/falls

Location: Public footpath between Snatts Road and Pudding Cake Lane

In various places along the route between Downland Copse and The Drive, foliage growth encroaches upon the footpath, which may force pedestrians away from the improved surfaces and lead to trips/falls.

Recommendation

Foliage should be cut back as far as possible along the public footpath route between Downland Copse and The Drive.

5.7 Problem

Collisions between vehicles and pedestrians/cyclists

Location: Proposed shared footway/cycleway

The Audit Team notes that the width of verge between the A22 carriageway and the proposed shared footway/cycleway is to be maximised, but that it could be a minimum of 1.5 metres in one or two locations to accommodate highway structures. Whilst the risk of such collision is considered low, the outcome for the pedestrian/cyclist is likely to be poor due to the 60mph speed limit, potentially leading to serious or even fatal injuries.

Recommendation

Install a vehicle restraint system (VRS) between the A22 carriageway and the shared cycleway/footway, along its full length or as a minimum where the verge narrows.

5.8 Problem

Collisions between vehicles and pedestrians/cyclists

Location: Shared footway/cycleway where it crosses Batchelor Way

Visibility from pedestrians and cyclists crossing Batchelor Way toward eastbound vehicles on Bellfarm Road is restricted by vegetation on the northwest corner of the junction. This could lead to collisions between cyclists/pedestrians crossing Batchelor Way and vehicles turning left into it, particularly as the former need to look over their right shoulders when crossing from west to east.

Recommendation

Improve visibility on the northwest corner of the junction between Batchelor Way and Bellfarm Road by cutting back foliage.

5.9 Problem

Collisions between vehicles and pedestrians

Location: Pedestrian crossing point on London Road

The proposed pedestrian crossing point is located a short distance downstream of the retained bus stop. A waiting bus would obscure visibility to the right for pedestrians crossing east to west and would also block forward visibility from a vehicle to the crossing, potentially leading to pedestrian/vehicle collisions.

Recommendation

Relocate the bus stop or the pedestrian crossing on London Road.

5.10 Problem

Pedestrian trips/falls

Location: Pedestrian crossing point on Southview Drive, near London Road

The proposed pedestrian crossing point is to be realigned, which may result in an existing gully being located on the desire line. This may cause trips or falls.

Recommendation

Relocate the existing gully away from the pedestrian crossing point on Southview Drive.

5.11 Problem

Pedestrian and cyclist injuries due to falls from height

Location: Ramped footpath/cyclepath on northwest side of Snatts Road, near Rocks Road

The proposed footway/cycleway will rise from Snatts Road and it is not clear how it will relate to ground levels on either side or if/how it will be lit. The Audit Team is concerned that unrestrained slopes or drops could lead to injuries to pedestrians and cyclists if they inadvertently leave the path.

Recommendation

A suitable restraint system should be used to prevent falls from the foot/cyclepath, and appropriate lighting should be provided.

5.12 Problem

Collisions between vehicles and pedestrians

Location: Footway where it crosses Rocks Road

Visibility between pedestrians crossing Rocks Road and south-eastbound vehicles on Rocks Road is restricted by vegetation. This could lead to collisions between pedestrians and vehicles.

Recommendation

Improve visibility to the northwest from the crossing point on Rocks Road by cutting back foliage.

5.13 Problem

Collisions between vehicles and pedestrians

Location: Rocks Road, southwest side, near Hunters Way

There is an existing lighting column within the footway along Rocks Road, a short distance northwest of Hunters Way. If retained within the widened footway it may force pushchairs and wheelchairs into the carriageway, where they will be at risk of collisions with passing vehicles.

Recommendation

Relocate the lighting column as necessary to maintain a suitable footway width along the southwest side of Rocks Road.

Road Signs, Carriageway Markings and Lighting

5.14 The Audit Team raises no concerns at this Stage 1 RSA in respect of road signs, carriageway markings and lighting. However, it is noted that some signage will need to be relocated to accommodate the shared cycleway/footway and sufficient horizontal/vertical clearances should be provided.

6 AUDIT TEAM STATEMENT

6.1 We certify that this Road Safety Audit has been carried out in accordance with DMRB document GG119.

Audit Team Leader

Steve Giles
BEng (Hons), IEng, FIHE, MCIHT, MICE, CMILT, MSoRSA, HE Cert Comp
Director & Senior Road Safety Consultant

Signed: 

Date: 27/04/2022

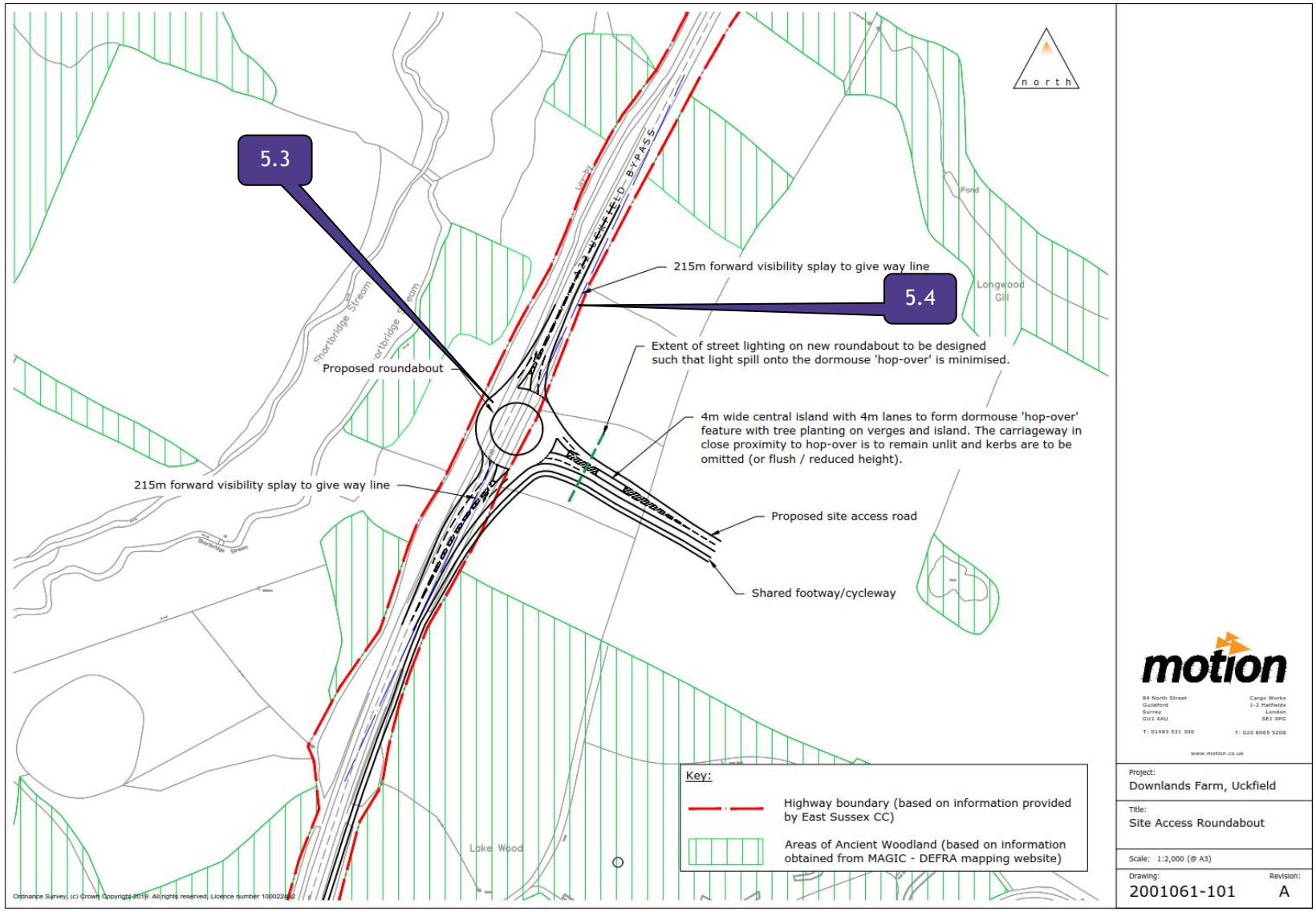
Audit Team Member(s)

Wendy Palmer
MCIHT, MSoRSA, FIHE, HE Cert Comp
Road Safety Engineer

Signed: 

Date: 27/04/2022

APPENDIX A
Location Plan(s)



C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-101a [Site Access Roundabout].dwg

motion

84 North Street
Guildford
Surrey
GU1 4AU
T: 01483 531 300

Cargo Works
1-2 Hatfields
London
SE1 9PG
T: 020 8065 5208

www.motion.co.uk

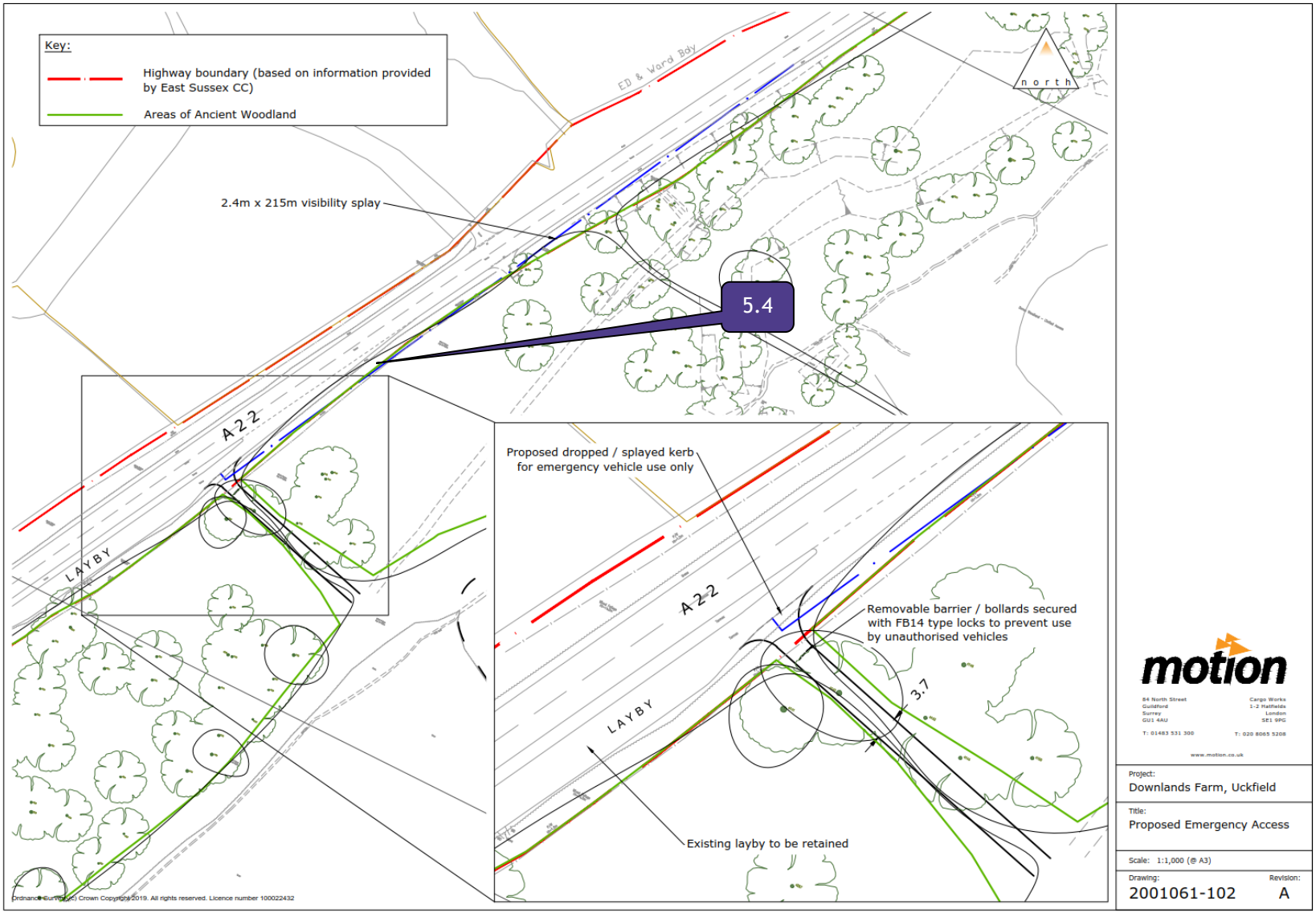
Project:
Downlands Farm, Uckfield

Title:
Site Access Roundabout

Scale: 1:2,000 (@ A3)

Drawing: 2001061-101

Revision: A



D:\SHAREPOINT\Motion\Staffsite - Gluckf 2001061\Drawings\2001061-102a [Emergency Access].dwg

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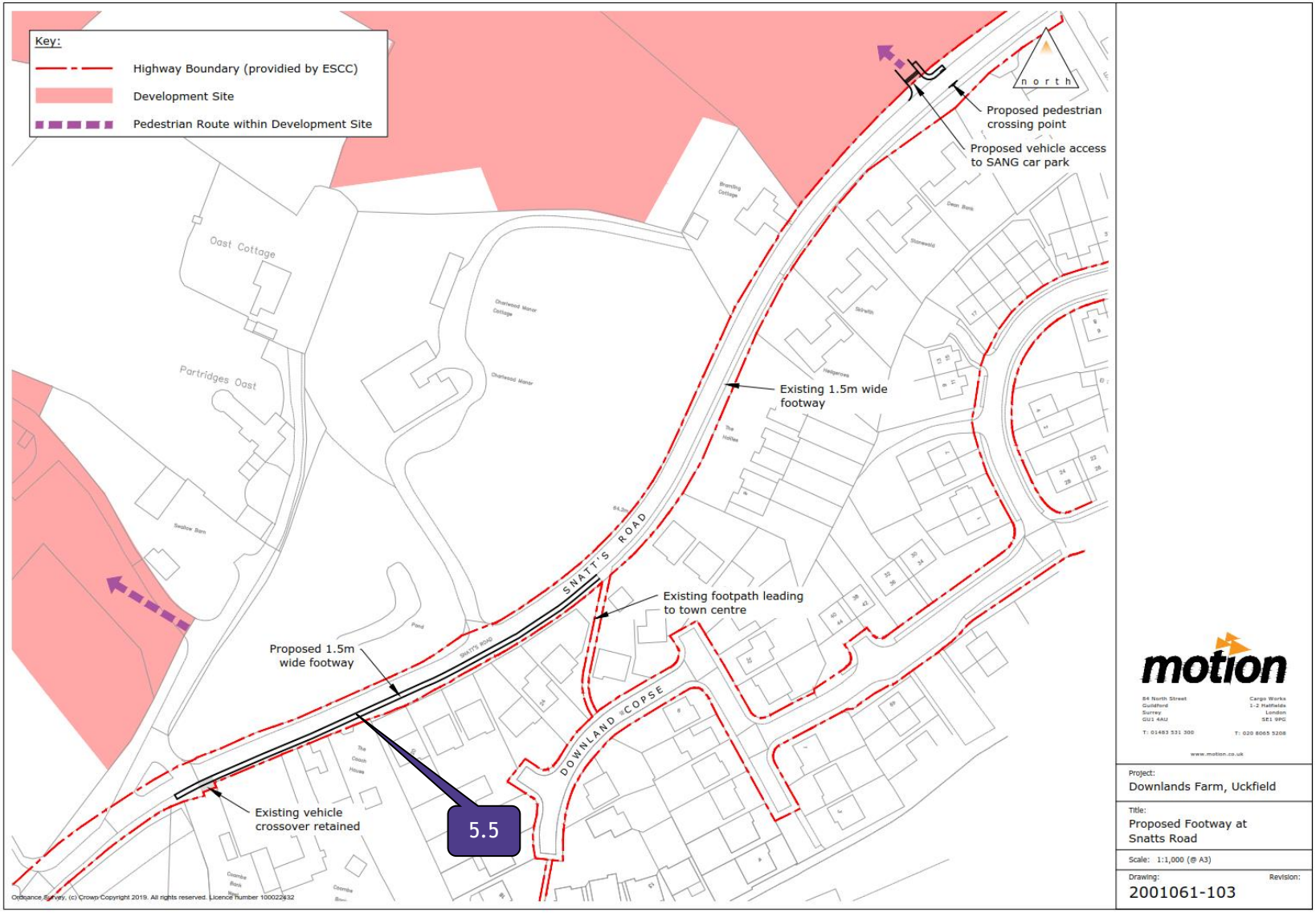
Project:
Downlands Farm, Uckfield

Title:
Proposed Emergency Access

Scale: 1:1,000 (@ A3)

Drawing: 2001061-102

Revision: A



D:\SHAREPOINT\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-103 [Snatts Rd].dwg

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84 North Street
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Surrey
GU1 4AU
T: 01483 531 300
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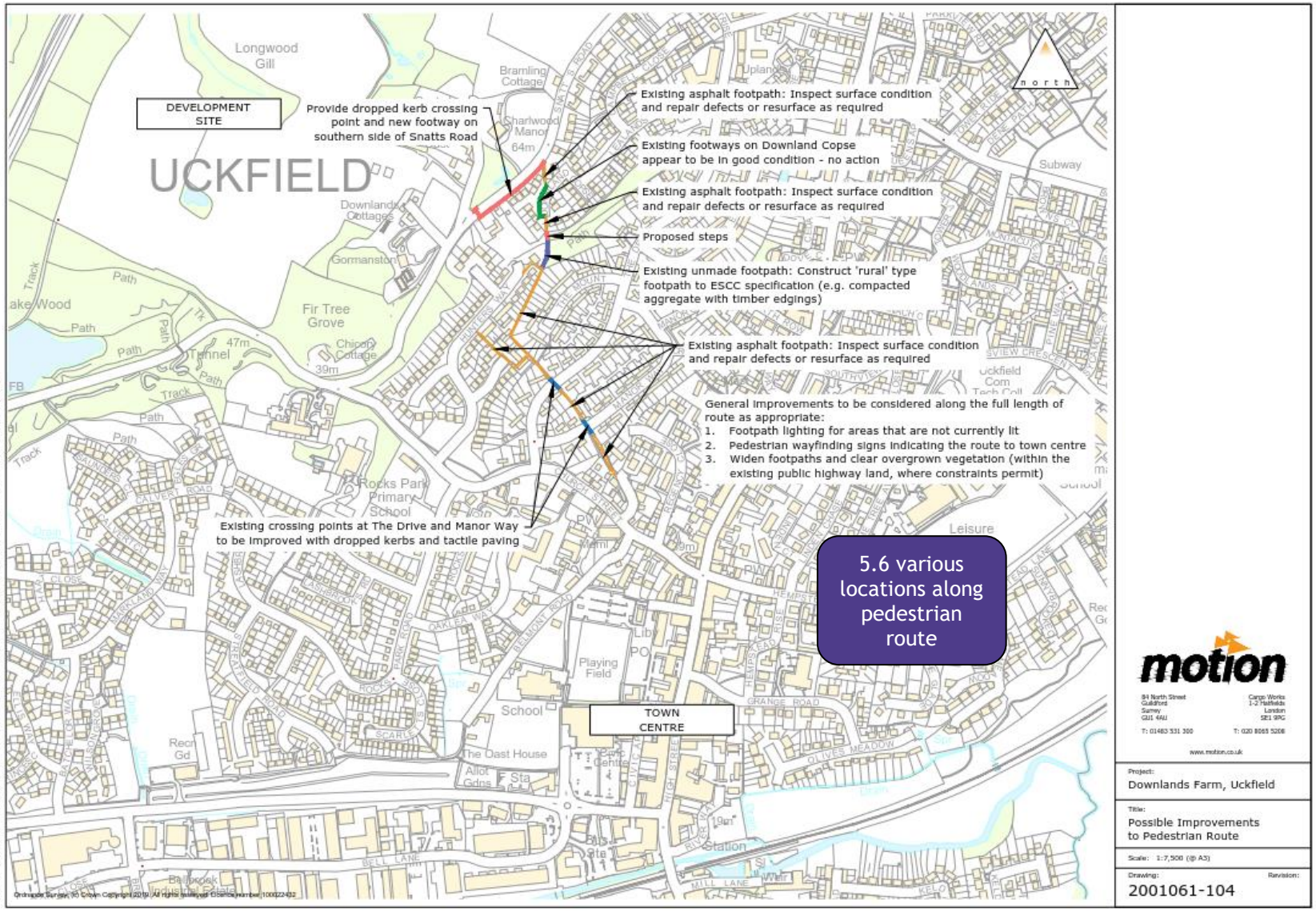
Project:
Downlands Farm, Uckfield

Title:
Proposed Footway at Snatts Road

Scale: 1:1,000 (@ A3)

Drawing: 2001061-103

Revision:



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Project:
Downlands Farm, Uckfield

Title:
Possible Improvements to Pedestrian Route

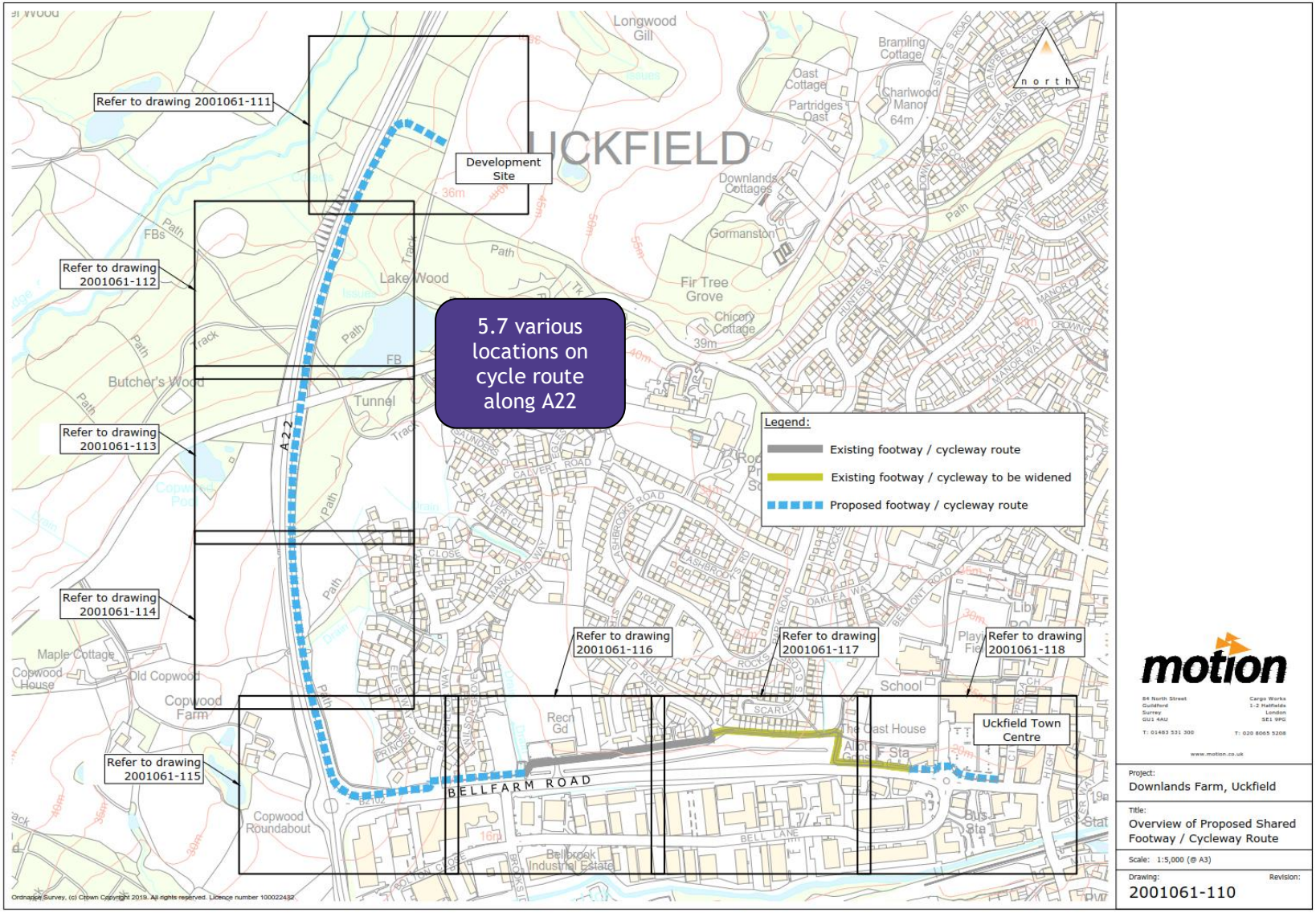
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Drawing: 2001061-104

Revision:

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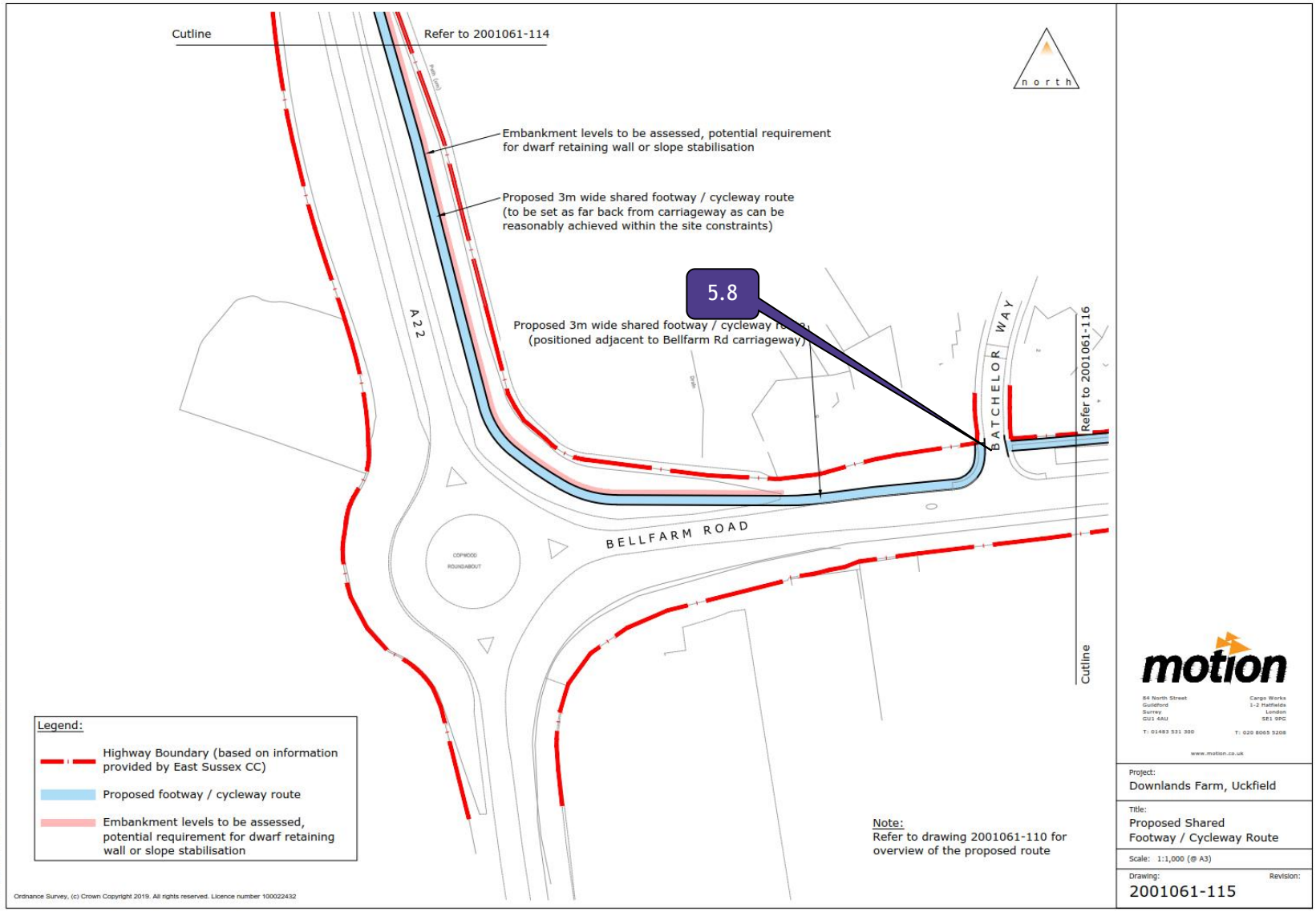
Project:
Downlands Farm, Uckfield

Title:
Overview of Proposed Shared Footway / Cycleway Route

Scale: 1:5,000 (@ A3)

Drawing: 2001061-110

Revision:



C:\Users\JulianSmith\Motion\StaffSite - Gluckf 2001061\Drawings\2001061-110 [Ped-Cycle-Route].dwg

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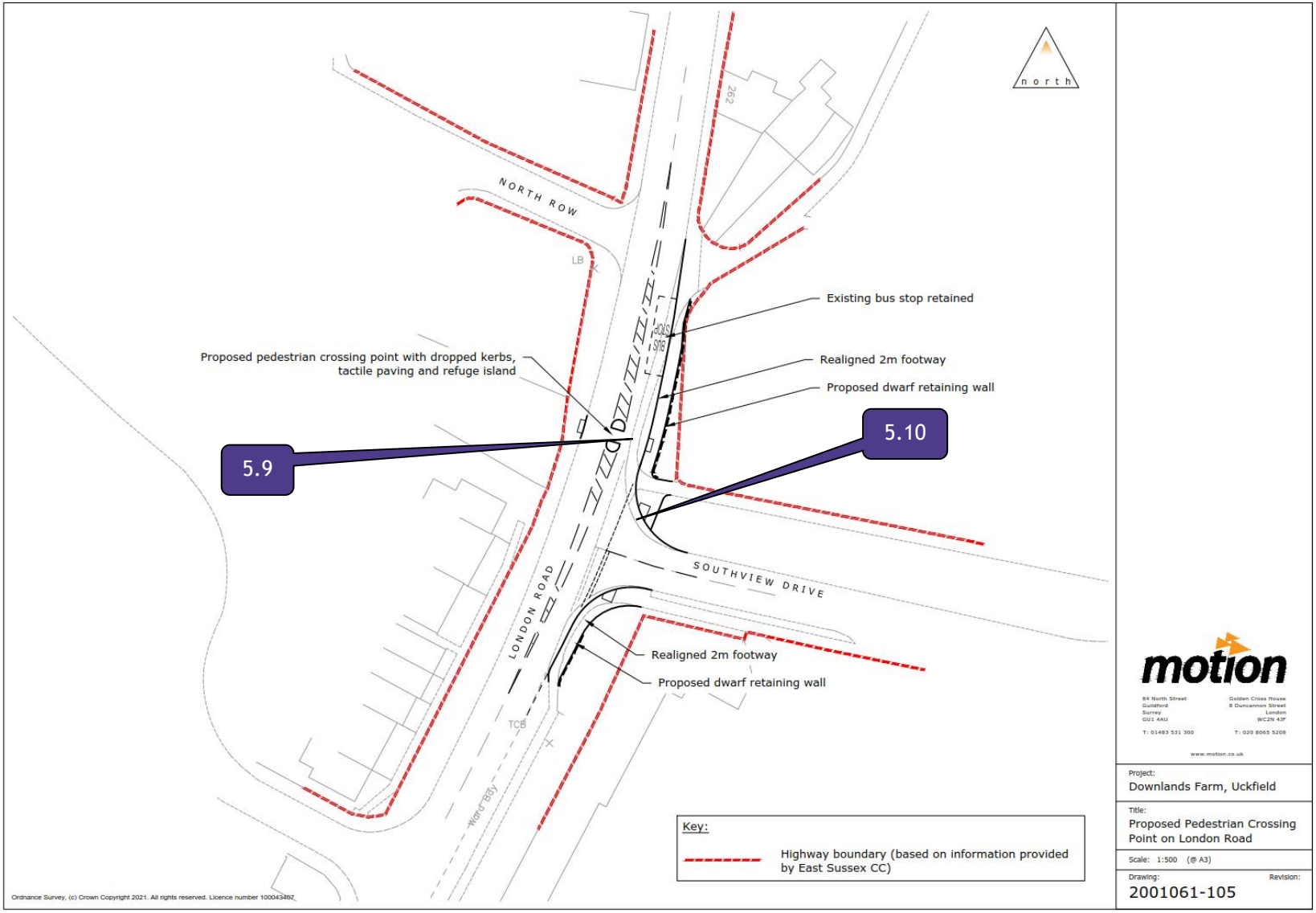
Project:
Downlands Farm, Uckfield

Title:
Proposed Shared Footway / Cycleway Route

Scale: 1:1,000 (@ A3)

Drawing: 2001061-115

Revision:



D:\SHAREPOINT\Motion\Staffsite - Gluckf 2001061\Drawings\2001061-105 [London Road].dwg

motion

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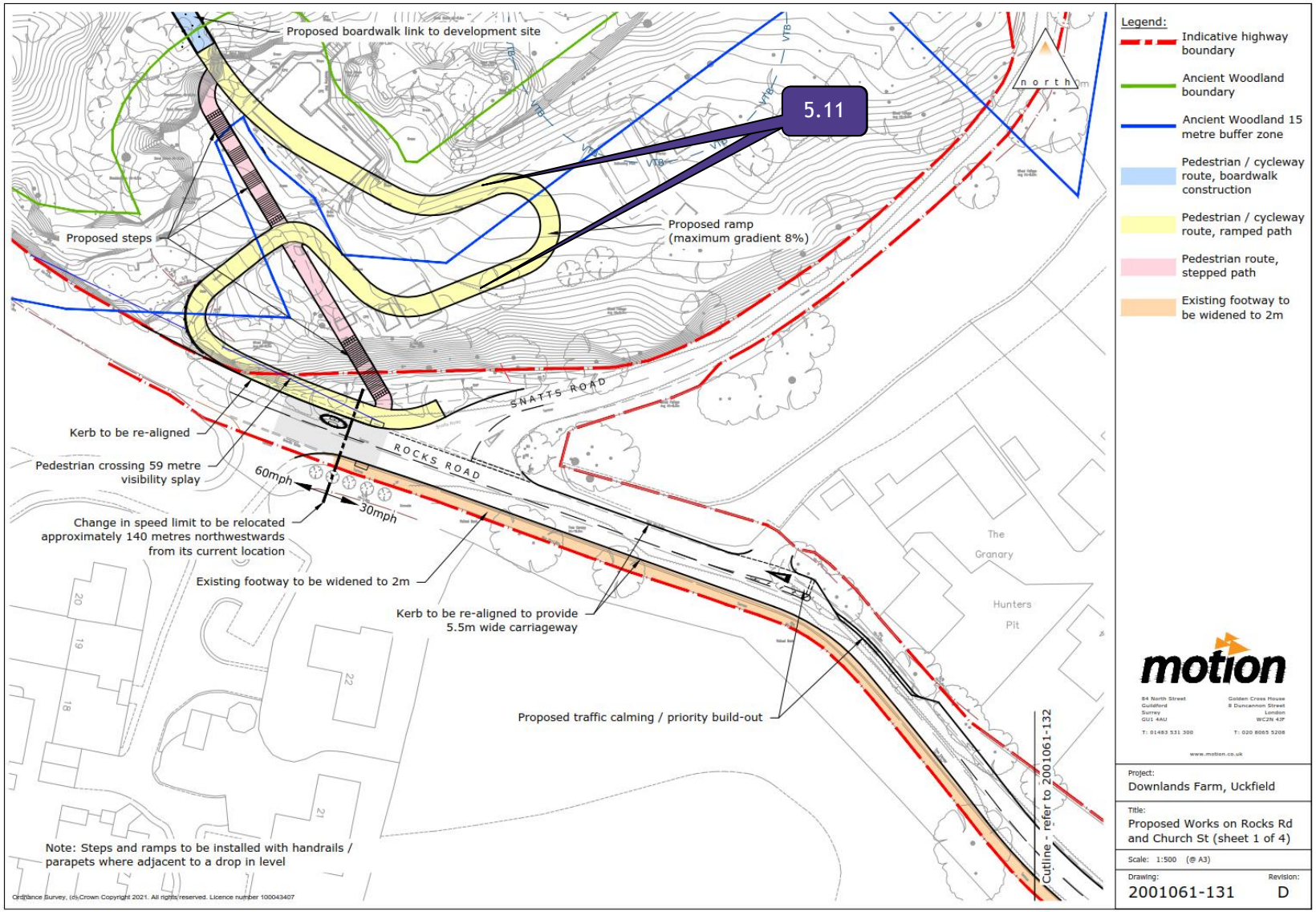
Project:
Downlands Farm, Uckfield

Title:
Proposed Pedestrian Crossing Point on London Road

Scale: 1:500 (@ A3)

Drawing: 2001061-105

Revision:



Legend:

- Indicative highway boundary
- Ancient Woodland boundary
- Ancient Woodland 15 metre buffer zone
- Pedestrian / cycleway route, boardwalk construction
- Pedestrian / cycleway route, ramped path
- Pedestrian route, stepped path
- Existing footway to be widened to 2m

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Project:
Downlands Farm, Uckfield

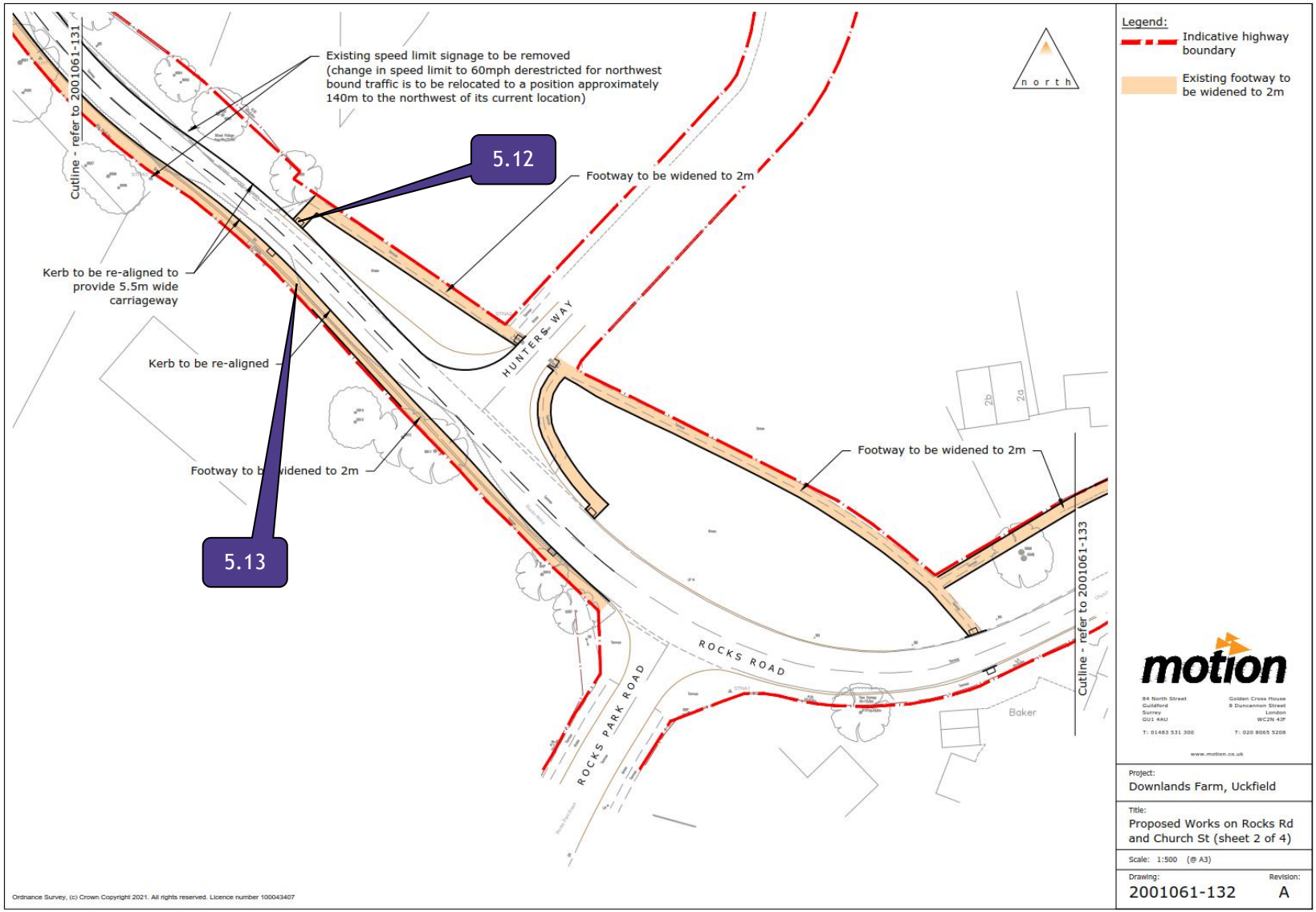
Title:
Proposed Works on Rocks Rd and Church St (sheet 1 of 4)

Scale: 1:500 (@ A3)

Drawing: 2001061-131

Revision: D

C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-131D, 132A, 133A, 134A [Rocks Road Route C].dwg



Legend:

- Indicative highway boundary
- Existing footway to be widened to 2m

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Project:
Downlands Farm, Uckfield

Title:
Proposed Works on Rocks Rd and Church St (sheet 2 of 4)

Scale: 1:500 (@ A3)

Drawing: 2001061-132

Revision: A

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DMRB GG119 - ROAD SAFETY AUDIT RESPONSE REPORT

PROJECT DETAILS

Report Title Stage 1 Road Safety Audit
Land at Downlands Farm, Uckfield
Proposed Access, Pedestrian and Cyclist Improvements

Date 28th April2022
Document ref and rev **2001061-RSA1-DR**
Prepared by Julian Smith, Motion
On behalf of East Sussex County Council

AUTHORISATION SHEET

Project Land at Downlands Farm, Uckfield
Report Title RSA1 Proposed Access, Pedestrian and Cyclist Improvements
Prepared by;
Name: Julian Smith
Position: Technical Director
Signed:

Organisation: Motion, 84 North Street, Guildford, GU1 4AU

Date:

Approved by;
Name:
Position:
Signed:

Organisation: East Sussex County Council

Date:

INTRODUCTION

The Stage 1 Road Safety Audit (RSA) was carried out in April 2022 by Gateway-TSP (ref 2001061 RSA1 v3.1), and relates to highway works associated with a residential development on the west side of Uckfield, in East Sussex. The Stage 1 RSA considered proposals to provide approximately 550 dwellings, the quantum of development proposed has subsequently been reduced to 424 dwellings, and the audit considers the following proposed works:

- New site access from A22, approximately 450m north of Rocks Road overbridge
- Emergency access (priority junction) north of main access
- Vehicle and pedestrian access to a SANG car park
- Footway along Snatts Road
- Improvements to public footpath connecting Snatts Road and Pudding Cake Lane
- Proposed pedestrian and cyclist improvements on Rocks Road, Church Street, London Road and Bellfarm Road

This Response Report was prepared by Julian Smith, Technical Director, Motion, 84 North Street, Guildford, GU1 4AU

KEY PERSONNEL

Overseeing Organisation

Insert details of the personnel from the overseeing organisation (ESCC contact)

RSA Team

Audit Team Leader	Steve Giles BEng (Hons), IEng, FIHE, MCIHT, MICE, CMILT, MSoRSA, HE Cert Comp Director & Senior Road Safety Consultant
Audit Team Member	Wendy Palmer MCIHT, MSoRSA, FIHE, HE Cert Comp Road Safety Engineer

Design Organisation

Julian Smith

Motion, 84 North Street, Guildford, GU1 4AU

ROAD SAFETY AUDIT DECISION LOG				
Item No.	**RSA Recommendation**	**Design Organisation Response**	**Overseeing Organisation Response**	**Agreed RSA Action (design organisation and overseeing organisations agreed action to the problem)**
5.1	n/a			
5.2	n/a			
5.3	Carry out vehicle swept path analysis for side-by-side turning movements at the proposed roundabout.	Vehicle tracking has been carried out (drawing 2001061-TK06) which shows that (1) two rigid delivery vehicles can travel simultaneously on the circulatory carriageway and (2) a rigid delivery vehicle can pass an articulated vehicle. Two articulated vehicles are unable to travel on the roundabout adjacent to one another; however, it is considered that drivers of such vehicles would not attempt such a manoeuvre and would straddle the lanes where necessary, as is commonplace on the road network.		
5.4	Carry out sufficient clearance of trees and foliage to provide adequate visibility at both junctions and to ensure that visibility will not be	The junction visibility splays on the A22 fall within the existing highway boundary (or development site). Roadside vegetation will be trimmed backed as required to ensure visibility is not obstructed. Site clearance drawings will be		

ROAD SAFETY AUDIT DECISION LOG				
Item No.	**RSA Recommendation**	**Design Organisation Response**	**Overseeing Organisation Response**	**Agreed RSA Action (design organisation and overseeing organisations agreed action to the problem)**
	compromised in future due to re-growth.	prepared at the detailed design stage.		
5.5	An edge restraint should be provided along the back of the new footway and the street lighting extended along its length.	Agreed, the levels will be assessed at the detailed design stage. Edge restraint will be provided where a drop in level occurs at the rear of the proposed footway, and street lighting provision will be extended. A street lighting design will be prepared at the detailed design stage.		
5.6	Foliage should be cut back as far as possible along the public footpath route between Downland Copse and The Drive.	Agreed, foliage to be cut back. Site clearance drawings will be prepared at the detailed design stage.		
5.7	Install a vehicle restraint system (VRS) between the A22 carriageway and the shared cycleway/footway, along its full length or as a minimum where the verge narrows.	The distance between the footway/cycleway has been maximised where possible, and only reduces to 1.5 metres where existing site constraints prevent a wider separation. It should be noted that the A22 has a hard-strip of circa 0.3 metres width, which when taken into consideration effectively increases the minimum separation distance from traffic to 1.8 metres. Notwithstanding this, the drawings have been revised to include a note stating that a minimum of 2 metres should be achieved where site		

ROAD SAFETY AUDIT DECISION LOG				
Item No.	**RSA Recommendation**	**Design Organisation Response**	**Overseeing Organisation Response**	**Agreed RSA Action (design organisation and overseeing organisations agreed action to the problem)**
		constraints permit (to achieve DMRB compliance). The installation of VRS along the full 1.1km length is considered to be an overprovision of infrastructure. However, the feasibility of shorter lengths of VRS at sections with narrower verge width will be reviewed at the detailed design stage in terms of practicality, working width requirements and proportionate cost vs benefit.		
5.8	Improve visibility on the northwest corner of the junction between Batchelor Way and Bellfarm Road by cutting back foliage.	Agreed, the roadside vegetation will be trimmed back as necessary to improve the crossing visibility at this location. Site clearance drawings will be prepared at the detailed design stage.		
5.9	Relocate the bus stop or the pedestrian crossing on London Road.	Agreed, the drawing has been amended to relocate the bus stop further north.		
5.10	Relocate the existing gully away from the pedestrian crossing point on Southview Drive.	Agreed, the gully will be relocated as part of the works. Drainage details to be prepared as part of detailed design.		

ROAD SAFETY AUDIT DECISION LOG				
Item No.	**RSA Recommendation**	**Design Organisation Response**	**Overseeing Organisation Response**	**Agreed RSA Action (design organisation and overseeing organisations agreed action to the problem)**
5.11	A suitable restraint system should be used to prevent falls from the foot/cyclepath, and appropriate lighting should be provided.	Agreed, a note has been added to drawings stating that guardrail is to be installed on the ramps and steps.		
5.12	Improve visibility to the northwest from the crossing point on Rocks Road by cutting back foliage.	Agreed, foliage should be cut back. Clearance drawings to be prepared as part of detailed design.		
5.13	Relocate the lighting column as necessary to maintain a suitable footway width along the southwest side of Rocks Road.	The lighting column is located at the ear of the footway, and it is intended that the footway is widened towards the carriageway; therefore it is intended that the lighting column will remain at the rear of the widened footway. Notwithstanding this a lighting review will be carried out at the detailed design stage.		
5.14	n/a			

DESIGN ORGANISATION AND OVERSEEING ORGANISATION STATEMENTS

Design Organisation Statement

On behalf of the design organisation I certify that:

1. **The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.**

Name: Julian Smith
Position: Technical Director
Signed:

Organisation: Motion, 84 North Street, Guildford, GU1 4AU

Date:

Overseeing Organisation Statement

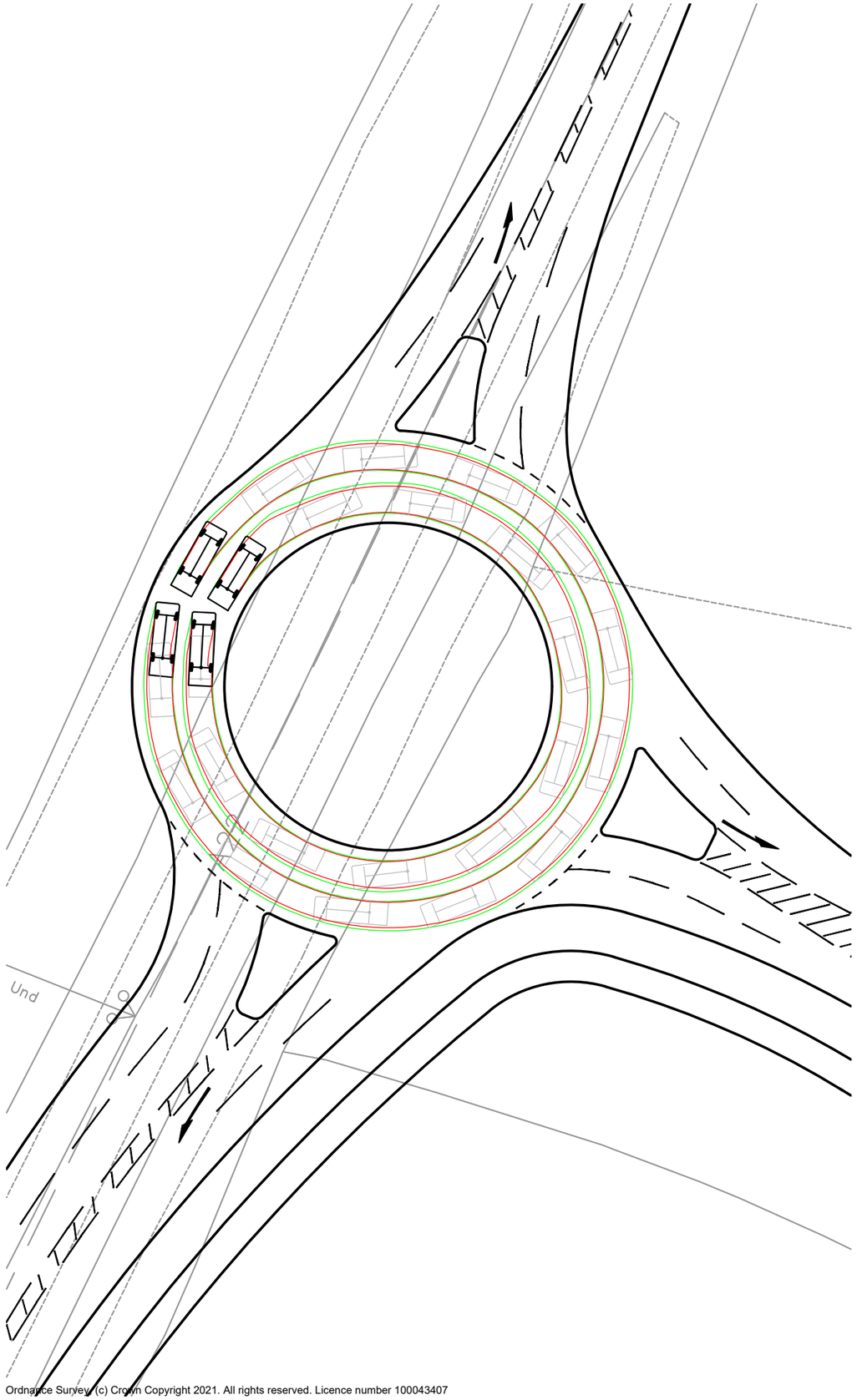
On behalf of the overseeing organisation I certify that:

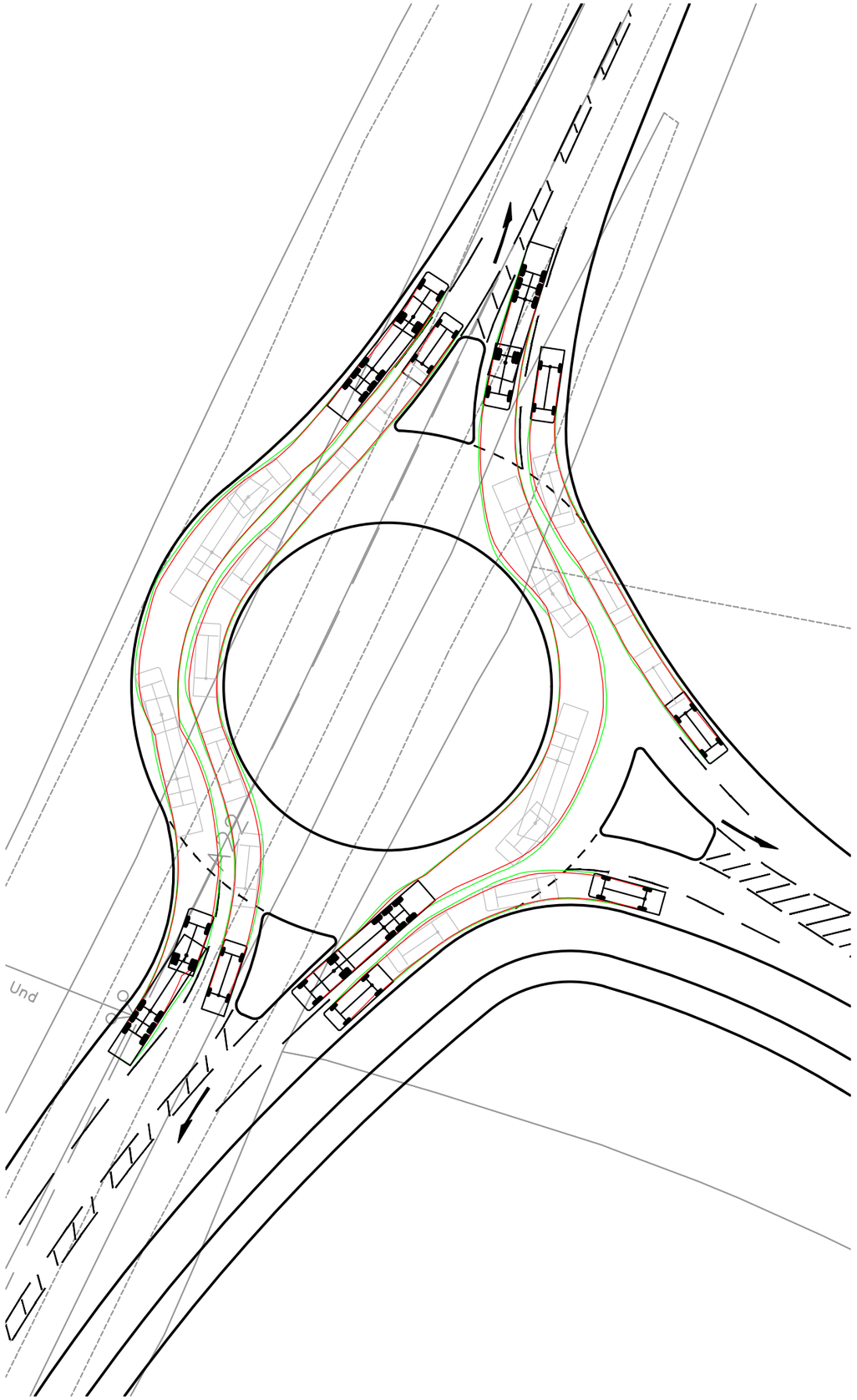
1. **The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation.**
2. **The agreed RSA actions will be progressed.**

Name:
Position:
Signed:

Organisation: East Sussex County Council

Date:





north

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Project:
Downlands Farm, Uckfield

Title:
Swept Paths of 7.2m LGV and 16.5m Articulated Vehicle

Scale: 1:500 (@ A3)

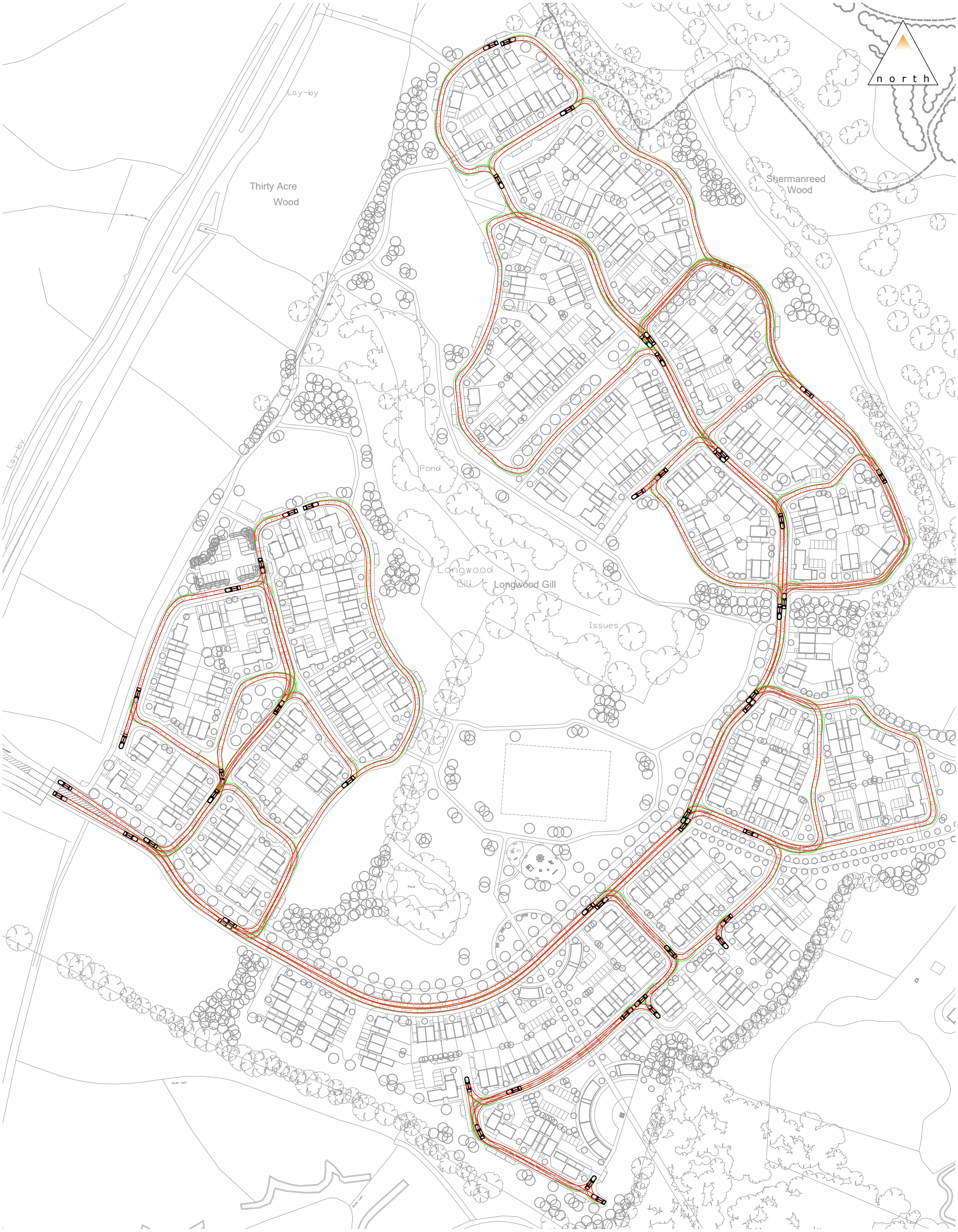
Drawing: 2001061-TK06

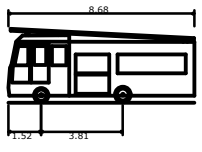
Revision:

C:\Users\JulianSmith\OneDrive - Motion\gluckf 2001061\Drawings\2001061-TK06 [Roundabout Tracking].dwg

Appendix G

Swept Path Analysis





DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

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Project:
Downlands Farm, Uckfield

Title:
Swept Path Analysis
Fire Appliance

Scale: 1:2,000 (@ A3)

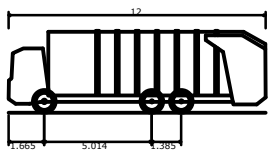
Notes:

Drawing:
2001061-TK03

Revision:
A

C:\Users\joeearp\OneDrive - Motion\gluckf 2001061\Drawings\2001061-TK03A To TK05A.dwg





Future ESCC Vehicle	
Overall Length	12.000m
Overall Width	3.000m
Overall Body Height	3.839m
Min Body Ground Clearance	0.391m
Track Width	3.000m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	11.550m

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Project:
Downlands Farm, Uckfield

Title:
Swept Path Analysis
Refuse Vehicle

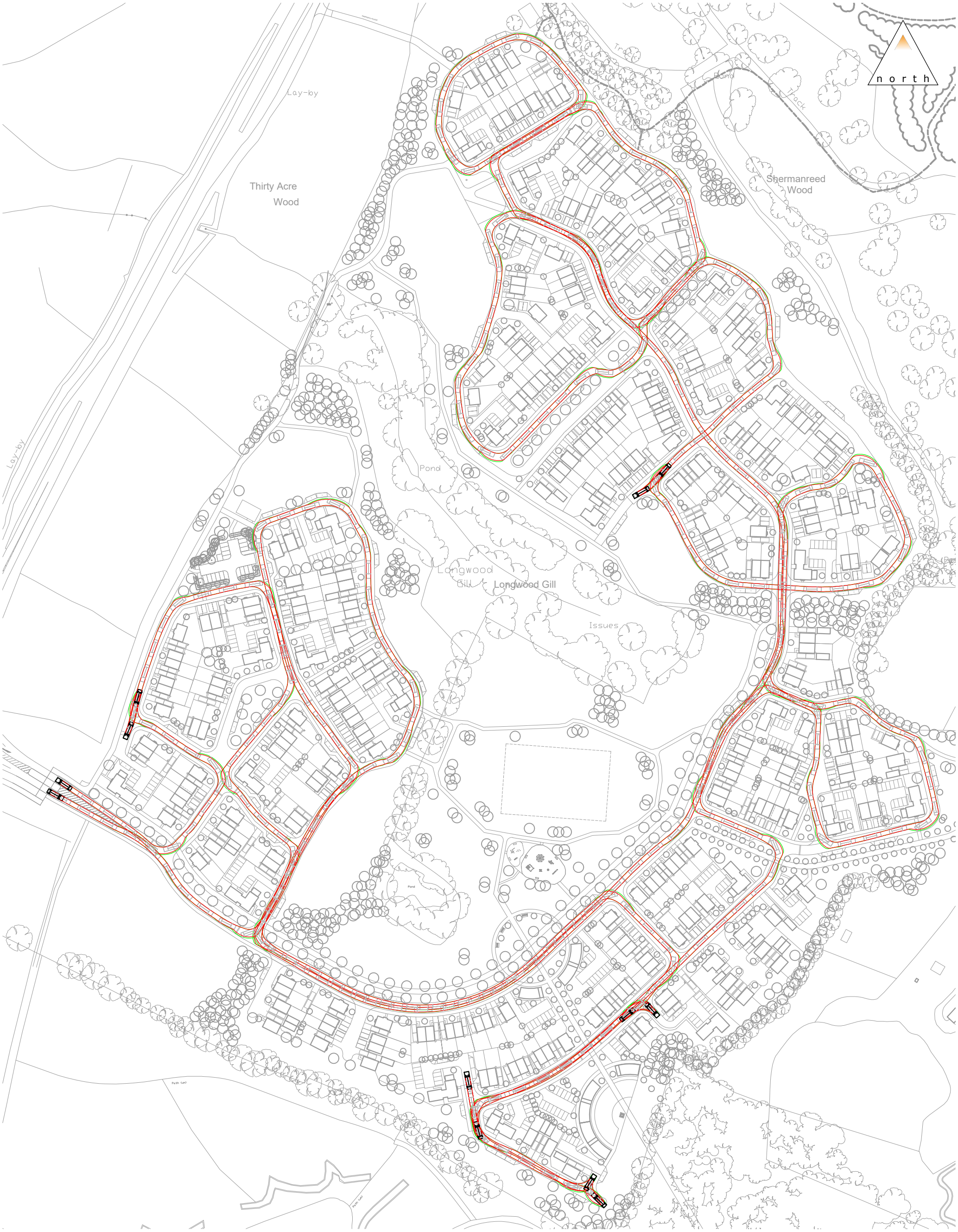
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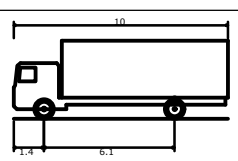
Notes:

Drawing:
2001061-TK04

Revision:
A

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FTA Design HG Rigid Vehicle (1998)

Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	11.000m

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Project:
Downlands Farm, Uckfield

Title:
Swept Path Analysis
10 metre Rigid Vehicle

Scale: 1:2,000 (@ A3)

Notes:

Drawing:
2001061-TK05

Revision:
A

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Appendix H

Community Bus Service

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1.0 Introduction

1.1 Motion has been appointed by Gleeson Land to advise on highway and transportation matters associated with proposals for a residential development of approximately 430 dwellings on land at Downlands Farm, Uckfield.

1.2 The site is located to the north of Uckfield and east of the A22 within the administrative boundaries of Wealden District Council (WDC; Local Planning Authority) and East Sussex County Council (ESCC; County Highway Authority). Uckfield provides a good range of local amenities, a railway station, as well as employment and leisure opportunities. The proposed sustainable transport strategy seeks to ensure appropriate links between the site and town, as well as other nearby amenities and employment, to assist future residents in making sustainable transport choices. The diagram below illustrates the proposed sustainable transport strategy related to development of the site.

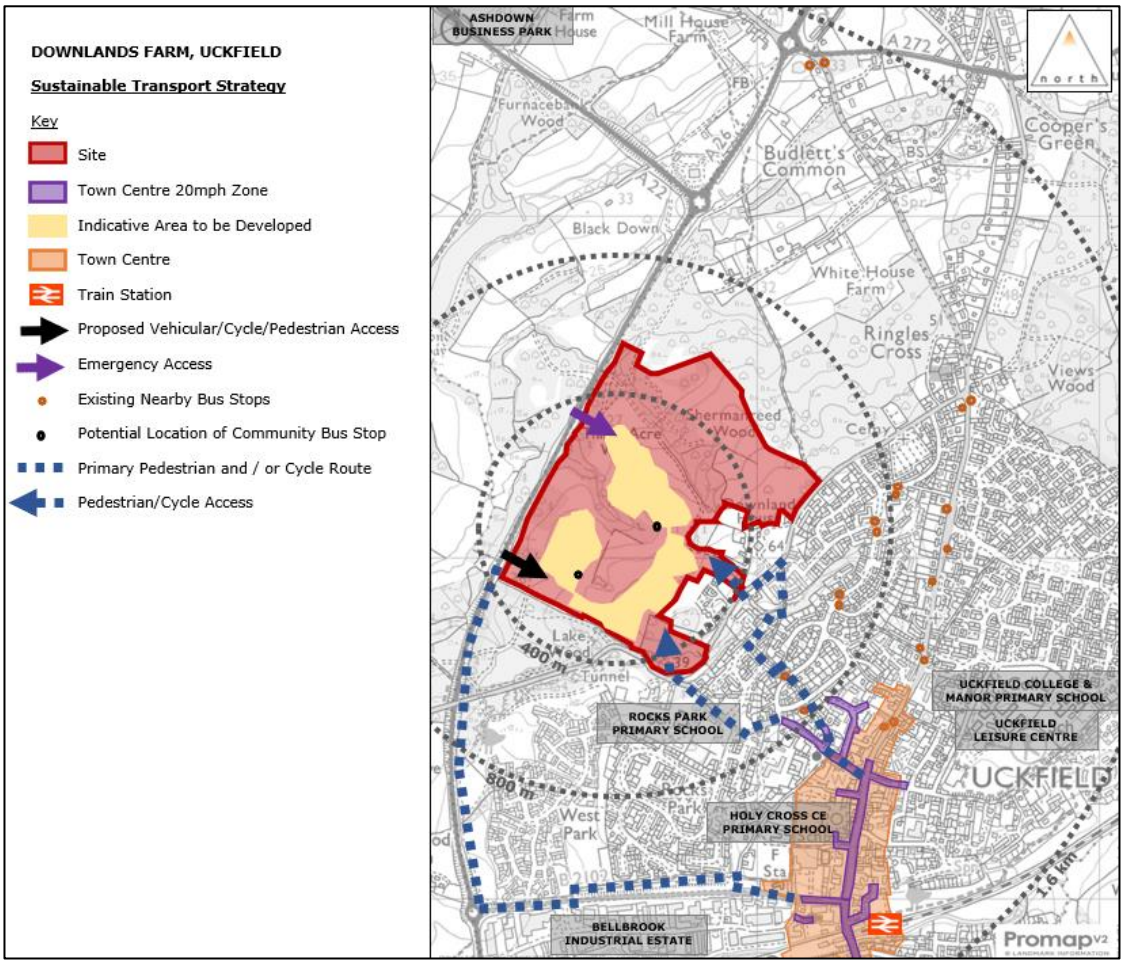


Figure 1.1 – Sustainable Transport Strategy

1.3 As part of a package of sustainable transport measures, it is proposed to provide a community bus service to enhance links between the development site and local facilities in and around Uckfield, including the town centre and railway station. The purpose of this note is to provide further detail on how this bus service would be implemented, the anticipated route and operating times of the service, and the potential costs of running the service.

1.4 The service is ultimately aimed at serving the needs of future residents of the Downlands Farm development. As such, routeing, timetabling and the anticipated pricing structure set out within this document are by necessity subject to change.

2.0 Operation

Operating Licence

2.1 Community bus services can be operated under either Section 19 or Section 22 permits as detailed in the Transport Act 1985. This requires that the service is operated on a not-for-profit basis. At this stage, it is anticipated that the service would operate under a Section 19 permit, and so be provided only for residents of the development. However, on the basis that the service may cover some areas not currently served by bus, there is potential to operate the service under Section 22.

Anticipated Passenger Demand

2.2 In order to establish the demand for bus services from the site, reference has been made to the existing modal split of residents in the area, based on Census data (method of travel to work). This is based on output area E00107812, which includes the northern part of the site and built-up area around Ringles Cross. The mode share data for this output area is comparable to that of the wider District (8% rail and 3% bus). The baseline estimates for trips by public transport are summarised in the table below.

Mode		**Morning Peak**		**Afternoon Peak**		**Daily**	
		Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Rail	6%	4	13	12	5	71	72
Bus	3%	3	7	7	3	41	41
Total	9%	7	20	18	9	112	113

Table 2.1 – Trips by Public Transport based on Modal Split from Census Data

2.3 In addition, and given the above Census data reflects the current public transport provision, we expect to increase the mode share of journeys by public transport to reflect the attractiveness of the service. In this regard we anticipate circa one-third of the estimated vehicle movements to/from the town during peak hours could be transferred to the community bus service, with around one-quarter transferring at other times. This is summarised in the table below.

	Morning Peak		**Afternoon Peak**		**Daily**	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Estimated Increase in Demand	4	11	11	5	48	49

Table 2.2 – Anticipated Vehicle Movements Transferred to Community Bus Service

2.4 The following table summarises total anticipated demand for the community bus service, based on the existing mode share of travel by public transport, and the expected transfer of vehicle movements to the service.

	Morning Peak		Afternoon Peak		Daily	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Census Public Transport Mode Share	7	20	18	9	112	113
Estimated Increase in Demand	4	11	11	5	48	49
Total	11	31	29	14	160	162

Table 2.3 – Total Anticipated Demand for Community Bus Service

2.5 Based on this analysis there would be around 42 to 43 journeys by public transport during the morning and afternoon peak hours. This includes trips by rail which the community bus service would facilitate. On this basis it is considered that providing 14/16 seater mini-buses would be the most appropriate to ensure that there is sufficient capacity to cater for peak demands.

Vehicle & Maintenance

2.6 It is anticipated that two mini-buses with capacity for up to 16 passengers (excluding the driver) would be used for the community bus service. It is considered that the most appropriate method of procuring the vehicle would be for the management company to enter into a hire purchase agreement with a supplier. Initial investigations into the costs associated with hiring a 14 to 16 seat mini-bus, assuming a 60 month contract suggest that this would cost approximately £400 per month. This equates to a cost of circa £24,000 (excluding VAT) over the 60 month period, or £4,800 per annum.

2.7 As a Class V vehicle, it will be required to be tested at an approved HGV/LGV testing station or designated MOT testing station that is authorised to test such vehicles. To avoid any potential disruption to the regular running of the service, any required vehicle testing will be booked to take place on a Saturday wherever possible. However, it should be noted that the initial contract with the service provider would include the provision of a replacement vehicle when servicing/repairs are being undertaken in order to avoid any disruption to the service.

2.8 In addition to the formal tests, the vehicle will be subject to regular safety inspections. It is envisaged that these will be undertaken as part of the maintenance coverage associated with the contract and will include a review of specialist equipment (i.e. passenger lifts/ramps) in accordance with manufacturers recommendations and critical safety items, such as braking systems. Alongside this, drivers will be required to undertake daily vehicle checks (for example tyre pressure, lights, engine oil, etc) and be provided with a mechanism to record any problems.

2.9 The vehicles will be fitted with seat belts. To ensure that passengers are made aware of the legal requirement to wear them when travelling, signs will be provided at every seating position. In addition to this, the driver will remind passengers that are observed not wearing a seat belt to do so. In addition, the vehicle will include at least one fire extinguisher and a clearly marked first aid box that contains wipes, bandages and dressings.

Routeing & Timetabling

2.10 The route will be informed by the residents following occupation of the development, in liaison with ESCC as highway authority, to ensure that it is an attractive option that meets the needs of residents. At this stage it is envisaged that the main destinations would include Bellbrook Industrial Estate, Uckfield railway station, the town centre, Uckfield College (including Leisure Centre and Manor Primary School), Rocks Park Primary School, Holy Cross Primary School and Ashdown Business Park. It is anticipated that the town centre, railway station and other employment destinations would be serviced by a core service, supplemented by additional services at the beginning and end of the school day to serve the identified schools. A suggested route of the anticipated core and school services are shown on the plans included in **Appendix A**.

2.11 Having regard to the suggested routes, consideration has also been given to areas for setting down/picking-up passengers at each of the anticipated destinations outlined above, as well as any provision for turning, where appropriate. This has been done taking account of the nature of the destinations and local area during busy periods, where on-street parking for example may restrict space at these times. Plans showing indicative locations at each of the destinations along the suggested routes are also included in **Appendix A**. The focus has been to identify locations within the public highway, or that benefit from other public access and it is recognised that discussions will be necessary at an appropriate time with the relevant bodies/landowners (e.g. the District and County Councils and Network Rail) to seek to agree suitable arrangements. Indicative locations of community bus service stops within the site are outlined in the diagram at the beginning of this note. It may be that a central hub could be provided; at this stage however, the locations are based on an approximate 400 metre walk distance of the area to be developed.

2.12 The timetable of the community bus service will be determined in liaison with ESCC. It is intended that the core service would operate approximately every 30 minutes during the peak travel times Monday to Friday (e.g. 06:30 to 10:30 and 15:30 to 19:30 hours). The timetable would be scheduled to enable the service to be utilised for commuter trips and coordinate with train service to London Bridge and Oxted, where possible. At this stage it is considered that the intended frequency would be sufficient to meet the needs of residents, as considered above. Services between the peak travel periods could run at hourly intervals, for example, subject to demand. Similarly, an hourly service could operate on Saturdays. In relation to the school service, it is anticipated that this would operate at the beginning and end of the school day, to coordinate with school start and finish times.

3.0 Management & Marketing

Management Structure

3.1 A key requirement for operators of a community bus service licenced under the Transport Act 1985 is that they are not permitted to make a profit. In this regard, it is proposed that the Management Company set up to maintain the proposed development will be responsible for the day to day running of the service. It will be responsible for the overall control and management of the service, including ensuring that the obligations of operating a Section 19 permit are met (i.e. human resource requirements, vehicle maintenance liabilities, etc) as well as marketing the service.

Human Resources & Staffing

3.2 The Management Company will be responsible for all human resource matters, including ensuring that there are sufficient drivers to maintain the planned and published schedule. At this stage it is considered that an agreement will be reached with a local private hire firm that would provide drivers for the community bus on a daily basis.

3.3 There are significant benefits associated with sub-contracting drivers from a private hire firm, for example, they will be aware of the driving hour guidelines and have experience in ensuring the safety of passengers. Similarly, it will be possible to ensure that drivers of the community bus have passed specialist driver training courses, such as the Minibus Driver Awareness Scheme (MiDAS) operated by the Royal Society for the Prevention of Accidents (RoSPA) and have been subject to Disclosure and Barring Service (DBS) check. The latter is particularly relevant in this instance given that it is intended the community bus will serve a number of local schools.

Future Operation Opportunities

3.4 Once demand for the community bus service is established and proven, it may be appropriate to engage with commercial bus operators to explore opportunities for a commercial service to be developed. This would be considered in liaison with ESCC and this would be subject to a different licensing and fare arrangement.

Marketing Plan

3.5 To ensure the community bus service is successful it will be essential that it is marketed effectively. To ensure maximum uptake of the service it is considered that it will need to be closely aligned with the Residential Travel Plan that will be developed at the site. In this regard, it is considered that the service will be marketed through the resident's Welcome/Travel Information Packs and any on-site notice-board/dedicated development website that may be provided.

4.0 Funding

Planning Obligation

4.1 It is anticipated that the community bus service would be secured by planning obligation, with heads of terms in line with the indicative arrangements outlined within this note. As such, the up-front costs of the service would be funded by the developer to be delivered by the Management Company as outlined above.

Pricing Structure

4.2 As noted, community bus services operating under permits covered by the Transport Act 1985 are not permitted to operate for profit. As such the pricing structure currently proposed has been derived with reference to the projected operating costs of the service set out below.

4.3 Based on the suggested route plans, it is estimated that the operating costs to run the core and school services would together total circa £61,000 per annum. A breakdown of assumed operating costs is provided in the table below.

Item	Core Service	School Service
Hire purchase agreement	£5,000	£5,000
Insurance	£5,000	£5,000
Vehicle Tax	£260	£260
Fuel	£7,500	£500
Operator/Staff	£30,000	
Administration	£2,500	
Community Transport Association Membership	Up to £400 (depends on income)	

Table 4.1 – Indicative Community Bus Service Costs (per annum)

4.4 In order to meet this level of operating costs, assuming the price for a return journey was set at £2 for any journey on the core service (assuming travel on the school service is free), the core service would need to be carrying an average of 100 return journeys each operational day. This is less than the anticipated public transport demand associated with the development.

4.5 A number of measures designed to encourage more sustainable travel choices will be set out in a Residential Travel Plan accompanying a future planning application. The community bus service is considered to be a key factor in encouraging more sustainable travel choice and hence part of the Travel Plan. Furthermore, the proposed service could serve other residents of the area/along the route not currently served by bus, which could in turn increase potential customer base. Should demand for the service exceed the level of trips required to cover operating costs, the fares would be reviewed to ensure that it remains a not-for-profit service.

5.0 Case Studies

5.1 To give an idea of the type of service anticipated as part of the development on land at Downlands Farm, the table below outlines a couple of examples Motion has been involved in:

Case Study	Brief Description	Further Information
Nowhurst Business Park, Broadbridge Heath, West Sussex	Shuttle bus serving employment development of circa 26,942 square metres flexible industrial use, providing connections to Horsham railway station. Approved in February 2019.	Horsham District Council planning ref: DC/17/2131
Burghfield Park, Theale,	Community bus service to Theale train station, Arlington Business Park, Theale Primary School, Theale Green Community School, serving residential development of 225 dwellings. Whilst the application was dismissed at appeal, provision of the community bus service was agreed with West Berkshire as Highway Authority.	West Berkshire Council planning ref: 16/01240/OUTMAJ

Table 5.1 – Motion Community Bus Service Case Studies

5.2 Other community bus services operating in East Sussex, of a similar nature to that proposed at Downlands Farm, include:

- Community Transport for the Lewes Area operate existing community bus services between Uckfield and Crowborough (services 248/249) as well as other routes (https://www.ctla.org.uk/);
- Bexhill Community Bus operates four routes in Bexhill Monday to Saturday, providing scheduled services around the town where there are no commercial routes (http://www.bexhillcommunitybus.co.uk/); and
- Cuckmere Buses, based in Berwick operates 25 timetabled services per week, with eight 16-seater minibuses, serving communities where no commercial service is available (https://cuckmerebuses.org.uk).

6.0 Summary and Conclusions

6.1 This note has been prepared to outline how a future community bus service, provided to serve future residents of a development on land at Downlands Farm, Uckfield, would be operated, managed and funded.

6.2 Based on the information set out in this note, it is considered that it would be feasible to operate a community bus service tailored to meet the needs of future residents that complements existing public transport services, including rail links to London Bridge and Oxted. It is noted that as the service needs to cater for the future residents, exact details of timetabling and routeing will need to be agreed following occupation of the development to ensure that the service can evolve over time, having regard to changes in costs and the needs of residents, for example, and therefore ensure that it continues to provide a viable and attractive alternative to the private car in the long term.

CBS Appendix A

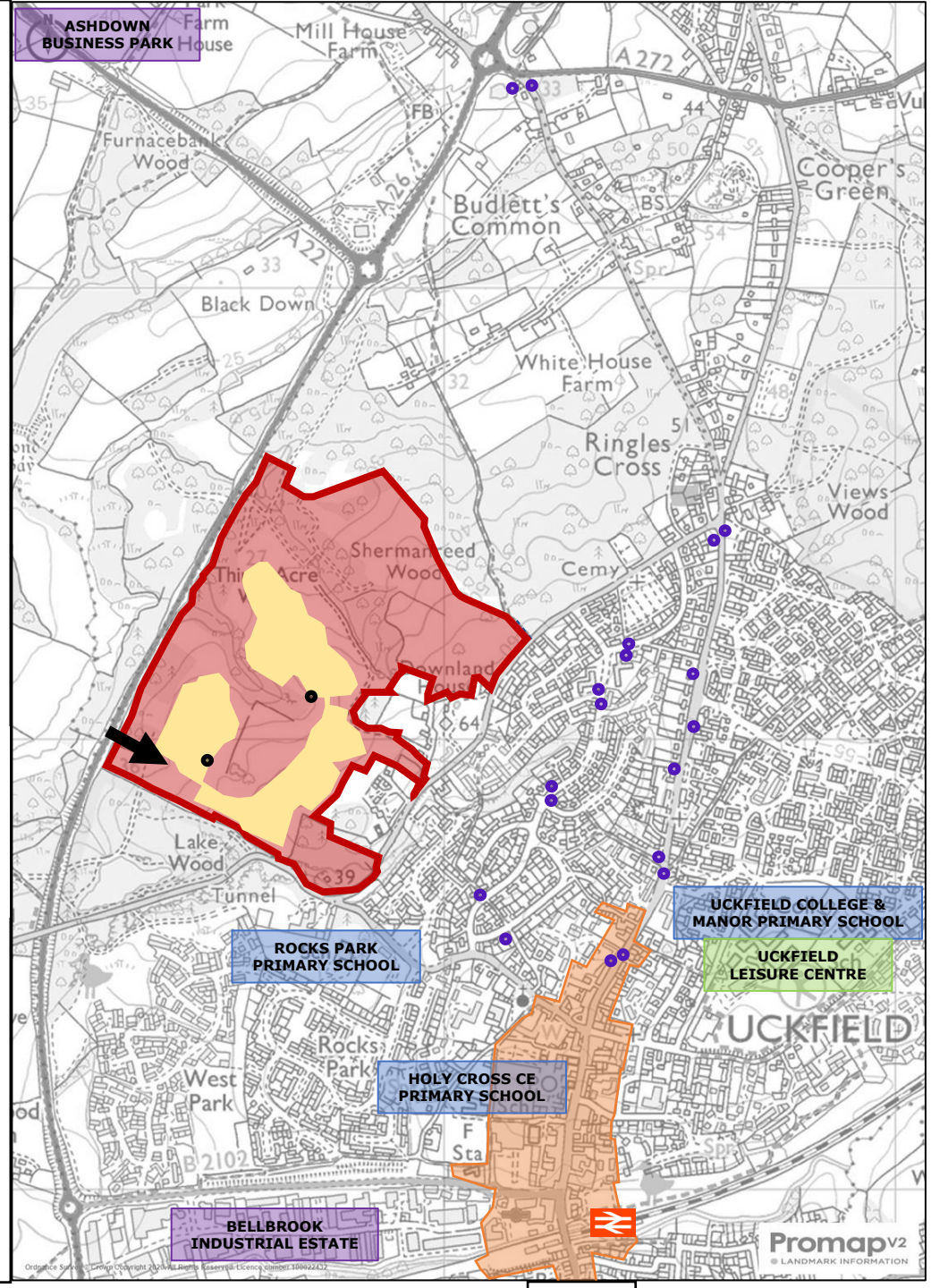
Suggested Route & Indicative Stops

DOWNLANDS FARM, UCKFIELD

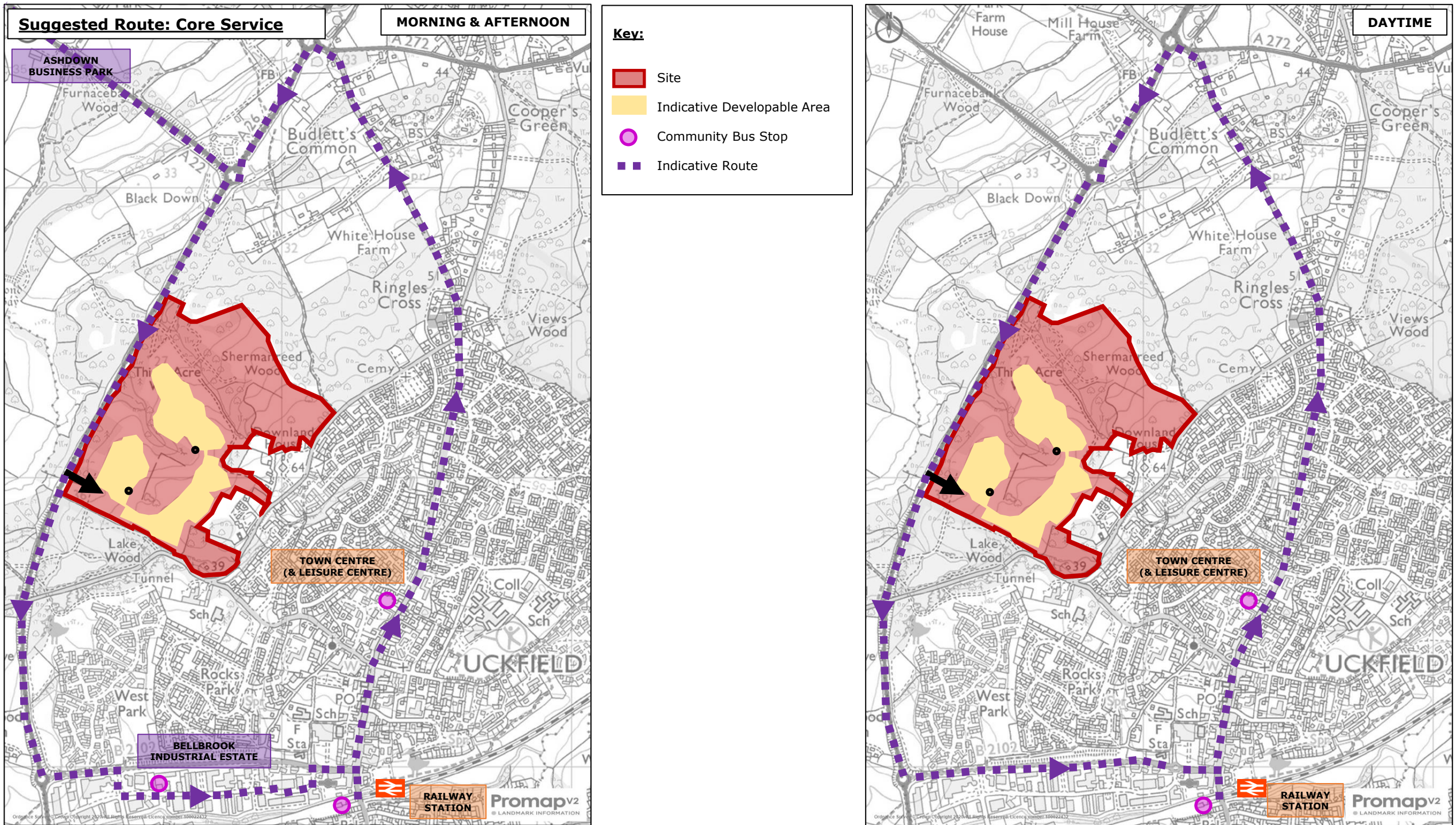
INDICATIVE Community Bus Service Destinations

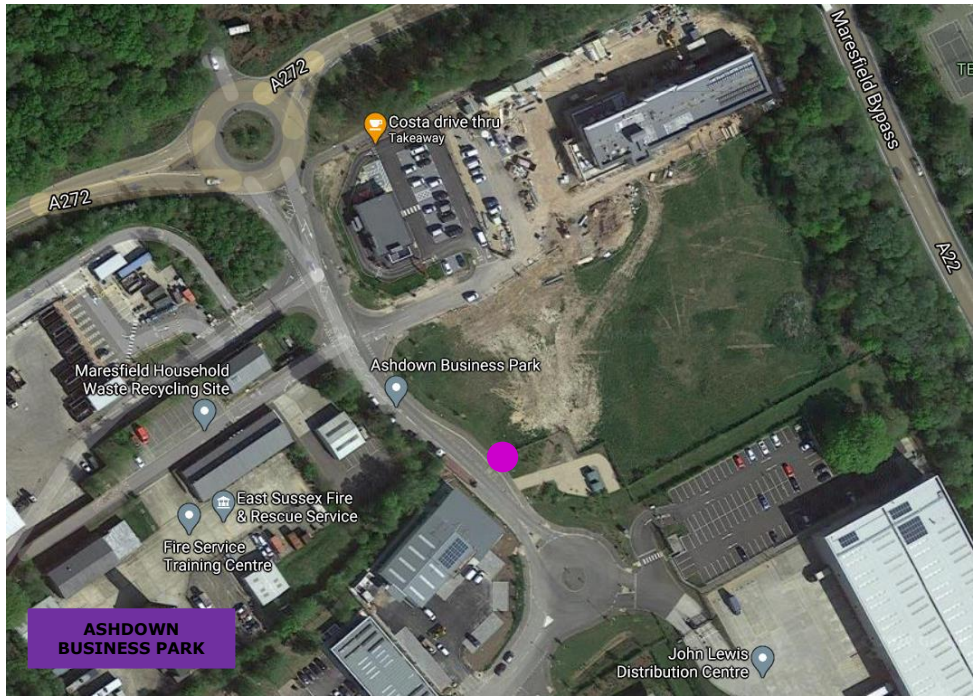
Key

- Site
- Nearby Bus Stops
- Train Station
- Proposed Vehicular Access
- Town Centre
- Employment
- Education
- Leisure
- Community Bus Stop
- Indicative Developable Area



Updated 2022-04-27

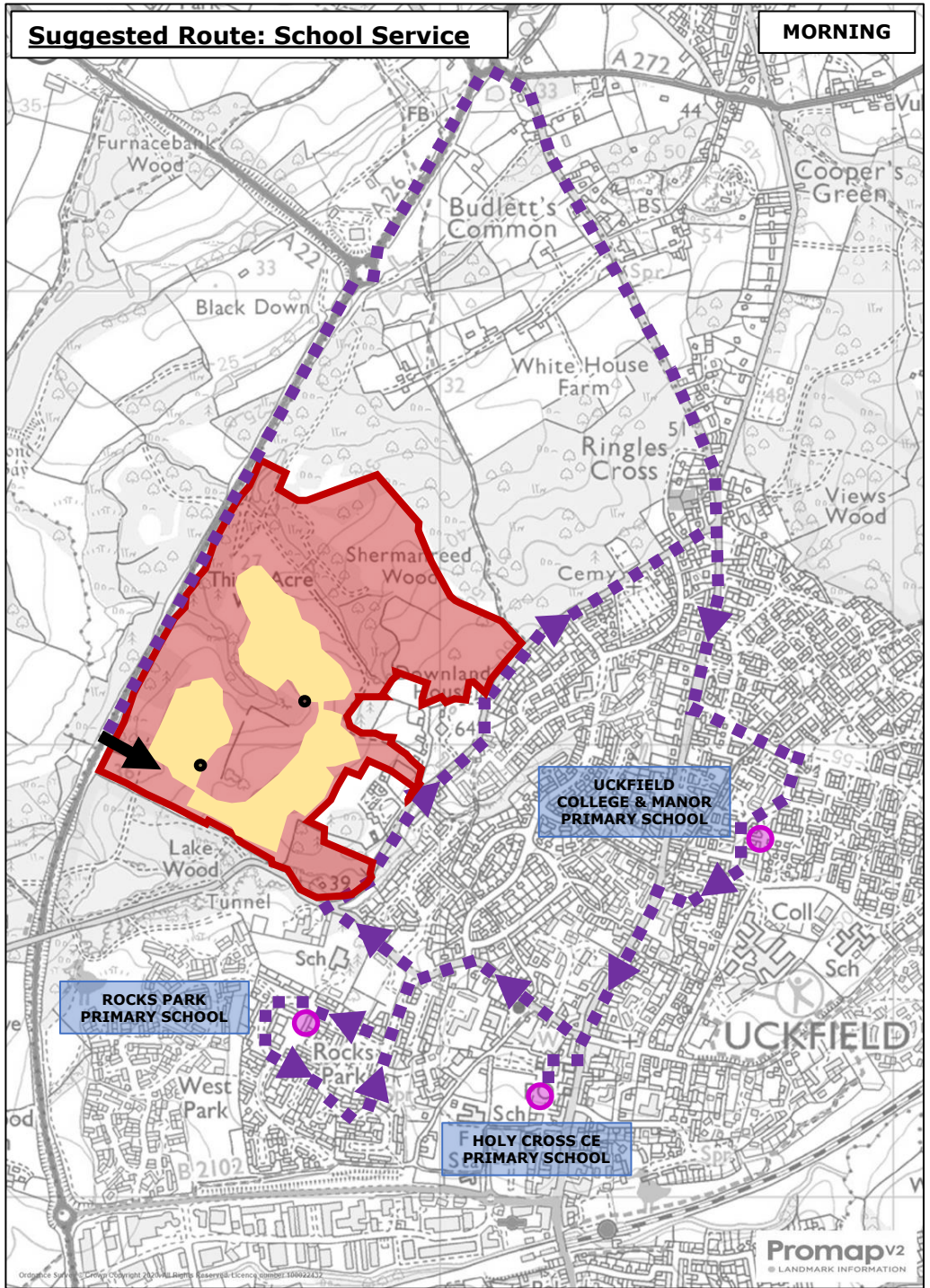

Suggested Route: Core Service
MORNING & AFTERNOON
ASHDOWN BUSINESS PARK
TOWN CENTRE (& LEISURE CENTRE)
BELLBROOK INDUSTRIAL ESTATE
RAILWAY STATION
Key:
Site
Indicative Developable Area
Community Bus Stop
Indicative Route
DAYTIME
TOWN CENTRE (& LEISURE CENTRE)
RAILWAY STATION
Promap V2
LANDMARK INFORMATION


A272
A272
Maresfield Bypass
A22
Costa drive thru
Takeaway
Maresfield Household
Waste Recycling Site
Ashdown Business Park
East Sussex Fire
& Rescue Service
Fire Service
Training Centre
John Lewis
Distribution Centre
ASHDOWN
BUSINESS PARK


Richard Green
Funeral Service
High St
Animal
(IAR)
Sanchos
Takeaway • Delivery
TOWN CENTRE
(& LEISURE CENTRE)
MFB Cars
Lime Tree Ave
The Rennie
Dance Academy
Temporarily closed
Uckfield
College
ACRES | Adult College
for Rural East Sussex
Uckfield Leisure Centre

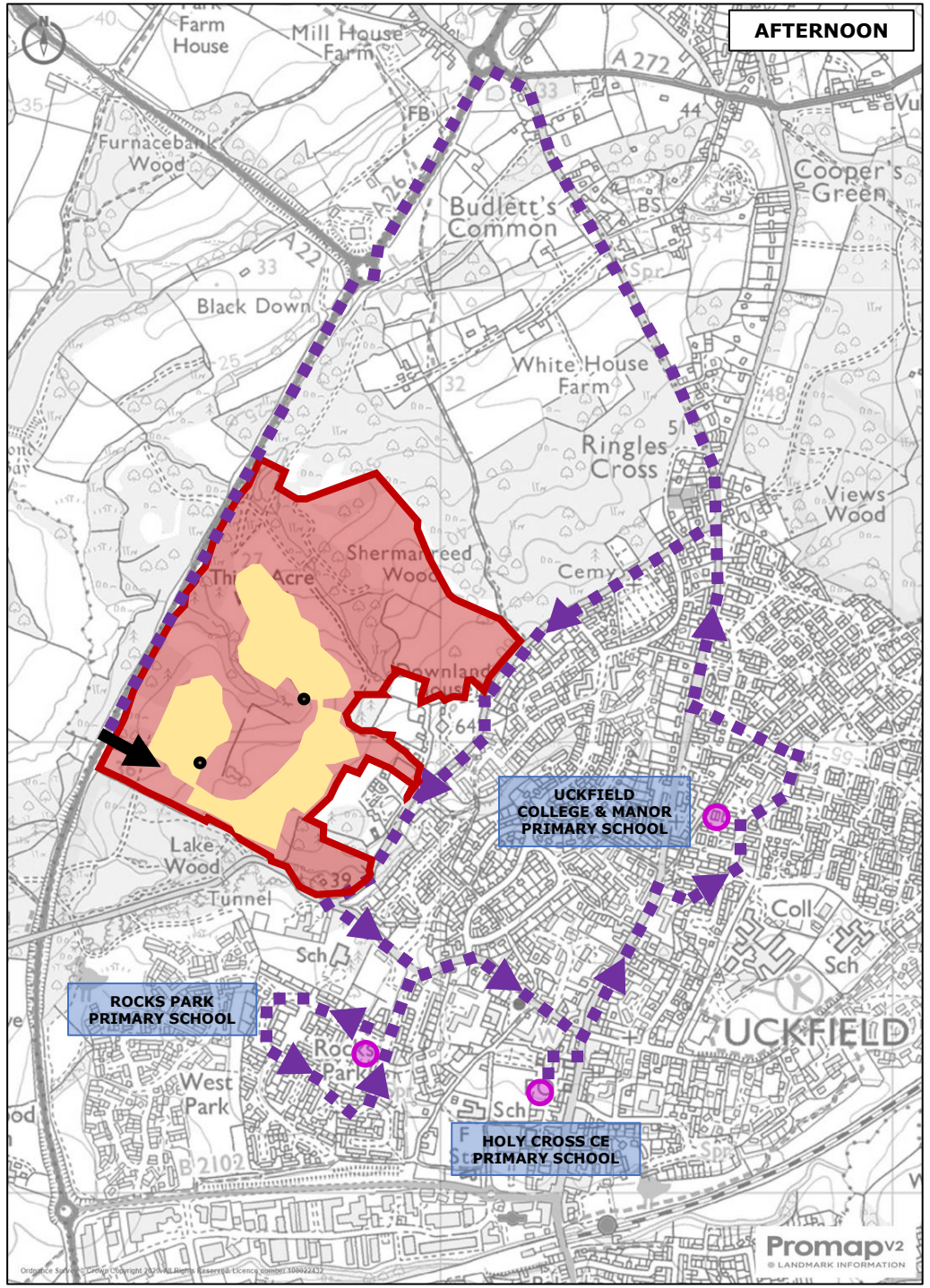

River Uck
R and R Taxis
Uckfield
Uck
Car Park Uckfield
Station | APCOA
B2102
Mill Ln
Mill Ln
Uckfield News
Newsstand
Wilmoths
Citroen Uckfield
Uckfield Train
Station Car Park
Station
Takeaway
RAILWAY
STATION

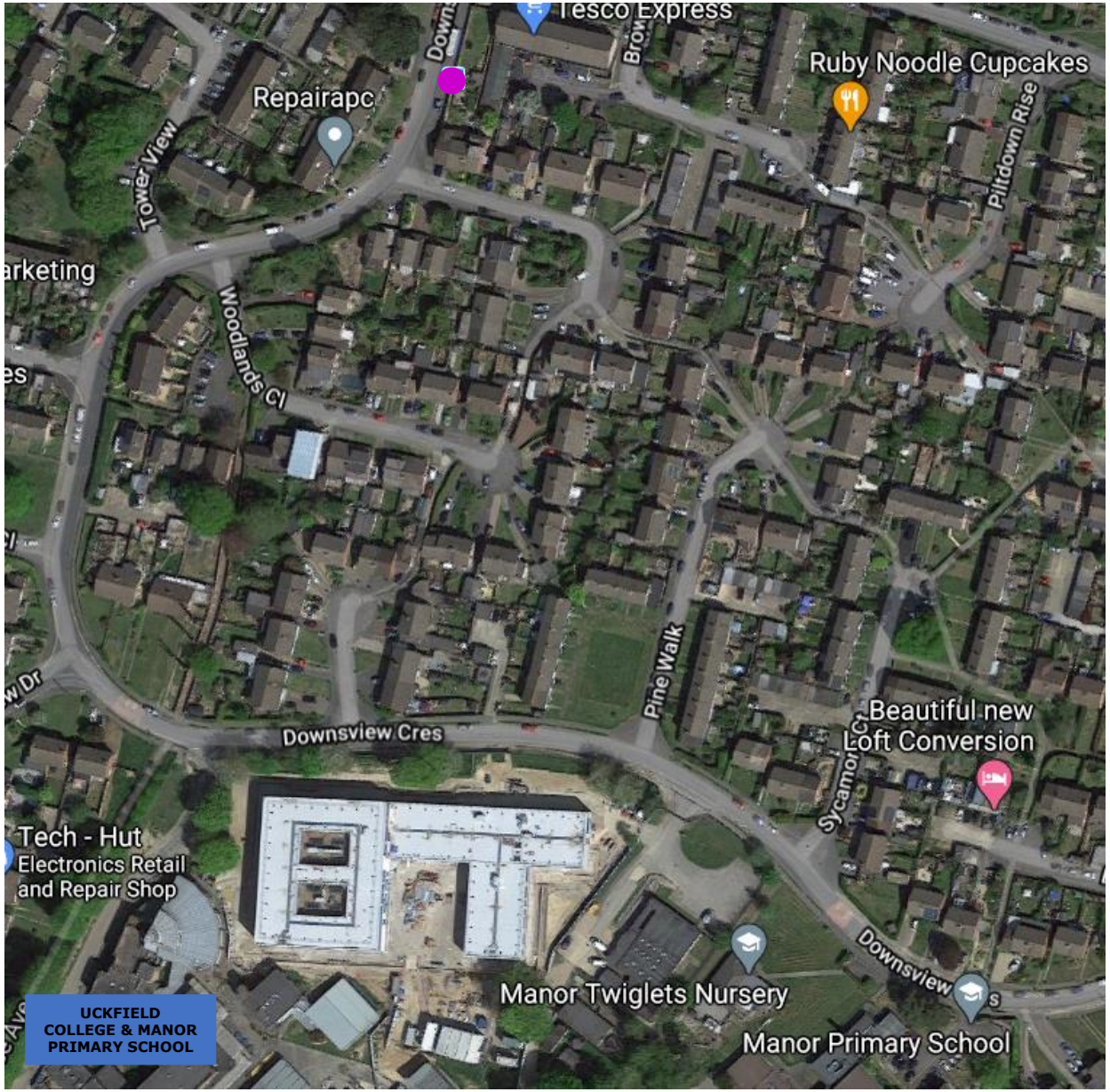

DIY Store
Hooked On Green
Fishing shop
Cannadines - Kitchens,
Bathrooms & Bedrooms
Jemtech (UK)
Pressure Clean
Screwfix
Building
materials supplier
Bell Ln
Bell Ln
Bell Ln
The Stores Dept
Tool Shop
Cube Self Storage
BellBrook Business Park
BELLBROOK
INDUSTRIAL ESTATE

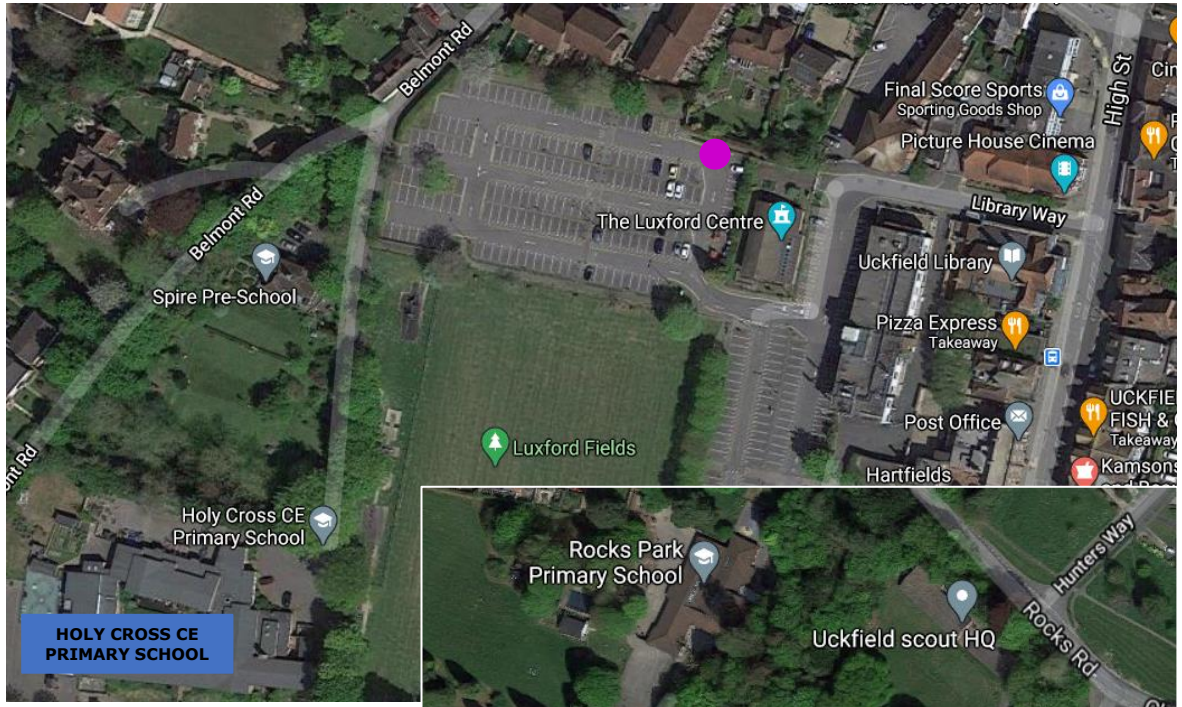


Key:

- Site
- Indicative Developable Area
- Community Bus Stop
- Indicative Route




Tesco Express
Ruby Noodle Cupcakes
Repairapc
Tower View
Piltdown Rise
Woodlands Cl
Pine Walk
Downsview Cres
Beautiful new
Loft Conversion
Tech - Hut
Electronics Retail
and Repair Shop
Manor Twiglets Nursery
Manor Primary School
UCKFIELD
COLLEGE & MANOR
PRIMARY SCHOOL


Belmont Rd
Final Score Sports
Sporting Goods Shop
Picture House Cinema
High St
The Luxford Centre
Library Way
Uckfield Library
Spire Pre-School
Pizza Express
Takeaway
Post Office
Luxford Fields
Hartfields
Holy Cross CE
Primary School
HOLY CROSS CE
PRIMARY SCHOOL


Rocks Park
Primary School
Uckfield scout HQ
Hunters Way
Rocks Rd
Rocks Park Rd
Lashbrooks Rd
Oaklea Way
ROCKS PARK
PRIMARY SCHOOL

Appendix I

TRICS Output Report

Calculation Reference: AUDIT-734001-200826-0809

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	KC	KENT	2 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	1 days
04	EAST ANGLIA		
	NF	NORFOLK	3 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 207 to 984 (units:)
Range Selected by User: 200 to 1000 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 24/09/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	4 days
Tuesday	3 days
Wednesday	3 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	10 days
Directional ATC Count	1 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	10

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	9
Out of Town	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	11 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	3 days
10,001 to 15,000	5 days
20,001 to 25,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	3 days
75,001 to 100,000	3 days
125,001 to 250,000	4 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	6 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	5 days
No	6 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	11 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

2 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

3 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

4 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

5 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total No of Dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

6 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

7 NF-03-A-07 MIXED HOUSES & FLATS NORFOLK
SILFIELD ROAD
WYMONDHAM

Edge of Town
Out of Town
Total No of Dwellings: 297
Survey date: FRIDAY *20/09/19* *Survey Type: DIRECTIONAL ATC COUNT*

8 NF-03-A-09 MIXED HOUSES & FLATS NORFOLK
ROUND HOUSE WAY
NORWICH
CRINGLEFORD
Edge of Town
Residential Zone
Total No of Dwellings: 984
Survey date: TUESDAY *24/09/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9	SC-03-A-05 REIGATE ROAD HORLEY	MIXED HOUSES		SURREY
	Edge of Town Residential Zone Total No of Dwellings:		207	
	Survey date: MONDAY		*01/04/19*	*Survey Type: MANUAL*
10	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings:	DETACHED & SEMI-DETACHED	248	STAFFORDSHIRE
	Survey date: WEDNESDAY		*22/11/17*	*Survey Type: MANUAL*
11	WS-03-A-11 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings:	MIXED HOUSES	918	WEST SUSSEX
	Survey date: TUESDAY		*02/04/19*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	418	0.078	11	418	0.313	11	418	0.391
08:00 - 09:00	11	418	0.137	11	418	0.386	11	418	0.523
09:00 - 10:00	11	418	0.134	11	418	0.159	11	418	0.293
10:00 - 11:00	11	418	0.104	11	418	0.126	11	418	0.230
11:00 - 12:00	11	418	0.111	11	418	0.118	11	418	0.229
12:00 - 13:00	11	418	0.138	11	418	0.139	11	418	0.277
13:00 - 14:00	11	418	0.136	11	418	0.130	11	418	0.266
14:00 - 15:00	11	418	0.153	11	418	0.165	11	418	0.318
15:00 - 16:00	11	418	0.239	11	418	0.166	11	418	0.405
16:00 - 17:00	11	418	0.276	11	418	0.163	11	418	0.439
17:00 - 18:00	11	418	0.359	11	418	0.164	11	418	0.523
18:00 - 19:00	11	418	0.313	11	418	0.169	11	418	0.482
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.178			2.198			4.376

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected:	207 - 984 (units:)
Survey date date range:	01/01/12 - 24/09/19
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	4
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix J

ESCC Traffic Data

Junction Name Owlesbury Roundabout (new roundabout in Ridgewood)
Junction Type Roundabout
Number of arms 3

Scenario: BY AM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	0	936
Ridgewood Farm (NE)	0	0	0
A22 Uckfield Bypass (SE)	1372	0	0

Scenario: BY PM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	0	1228
Ridgewood Farm (NE)	0	0	0
A22 Uckfield Bypass (SE)	892	0	0

Scenario: DM AM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	158	938
Ridgewood Farm (NE)	289	0	201
A22 Uckfield Bypass (SE)	1172	124	0

Scenario: DM PM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	221	1141
Ridgewood Farm (NE)	211	0	181
A22 Uckfield Bypass (SE)	944	185	0

Scenario: DS1 AM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	158	938
Ridgewood Farm (NE)	289	0	201
A22 Uckfield Bypass (SE)	1162	124	0

Scenario: DS1 PM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	220	1131
Ridgewood Farm (NE)	208	0	184
A22 Uckfield Bypass (SE)	943	185	0

Scenario: DS2 AM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	158	936
Ridgewood Farm (NE)	289	0	201
A22 Uckfield Bypass (SE)	1161	124	0

Scenario: DS2 PM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	221	1130
Ridgewood Farm (NE)	207	0	184
A22 Uckfield Bypass (SE)	942	184	0

Scenario: DS3 AM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	159	963
Ridgewood Farm (NE)	290	0	200
A22 Uckfield Bypass (SE)	1147	123	0

Scenario: DS3 PM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	221	1140
Ridgewood Farm (NE)	206	0	186
A22 Uckfield Bypass (SE)	991	184	0

Scenario: DS4 AM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	157	955
Ridgewood Farm (NE)	289	0	200
A22 Uckfield Bypass (SE)	1170	124	0

Scenario: DS4 PM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	220	1134
Ridgewood Farm (NE)	213	0	179
A22 Uckfield Bypass (SE)	940	185	0

Scenario: DS5 AM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	157	974
Ridgewood Farm (NE)	291	0	199
A22 Uckfield Bypass (SE)	1127	123	0

Scenario: DS5 PM	A22 Uckfield Bypass (NW)	Ridgewood Farm (NE)	A22 Uckfield Bypass (SE)
A22 Uckfield Bypass (NW)	0	220	1113
Ridgewood Farm (NE)	205	0	186
A22 Uckfield Bypass (SE)	984	184	0

Appendix K

Junction Model Output Files

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: M01a-Budletts Roundabout Jacobs 22-02-18.j9
Path: C:\Users\JoeEarp\OneDrive - Motion\TP Projects\gluckf 2001061\Analysis\Junction Modelling
Report generation date: 18/02/2022 10:49:54

»2018 Baseline, AM
»2018 Baseline, PM
»2039 Baseline, AM
»2039 Baseline, PM
»2039 with Downlands Farm, AM
»2039 with Downlands Farm, PM
»2039 with All Developments, AM
»2039 with All Developments, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2018 Baseline							
1 - A26 (North)	D1	1.0	5.32	0.51	D2	1.1	6.87	0.53
2 - London Road (East)		2.0	8.50	0.67		0.4	3.82	0.30
3 - A26 (South)		0.6	3.96	0.36		1.3	4.91	0.57
4 - London Road (West)		0.6	6.74	0.38		3.4	21.69	0.78
	2039 Baseline							
1 - A26 (North)	D3	1.2	5.97	0.55	D4	1.8	9.69	0.64
2 - London Road (East)		2.3	9.68	0.70		0.5	4.18	0.34
3 - A26 (South)		0.7	4.41	0.41		1.1	4.53	0.52
4 - London Road (West)		0.7	7.10	0.42		9.9	52.43	0.93
	2039 with Downlands Farm							
1 - A26 (North)	D5	1.3	6.37	0.57	D6	2.1	11.10	0.69
2 - London Road (East)		2.9	11.68	0.75		0.5	4.31	0.35
3 - A26 (South)		0.8	4.78	0.45		1.1	4.63	0.53
4 - London Road (West)		0.7	7.44	0.42		13.9	70.47	0.97
	2039 with All Developments							
1 - A26 (North)	D7	1.4	6.56	0.58	D8	2.5	12.61	0.72
2 - London Road (East)		3.3	12.87	0.77		0.5	4.25	0.34
3 - A26 (South)		0.8	4.85	0.45		1.1	4.62	0.53
4 - London Road (West)		0.7	7.39	0.41		20.7	96.24	1.01

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Budletts Roundabout
Location	Uckfield, East Sussex
Site number	
Date	26/10/2021
Version	
Status	(new file)
Identifier	
Client	Gleeson Strategic Lane
Jobnumber	gluckf/2001061
Enumerator	MOTION\JoeEarp
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A26 (North)	
2	London Road (East)	
3	A26 (South)	
4	London Road (West)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A26 (North)	3.00	7.22	13.5	90.0	60.0	23.0	
2 - London Road (East)	3.19	7.17	10.9	45.0	60.0	24.0	
3 - A26 (South)	3.63	7.10	12.9	130.0	60.0	20.0	
4 - London Road (West)	3.00	4.37	8.0	18.0	60.0	23.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A26 (North)	0.564	1645
2 - London Road (East)	0.552	1596
3 - A26 (South)	0.593	1792
4 - London Road (West)	0.475	1199

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	639	100.000
2 - London Road (East)		ONE HOUR	✓	775	100.000
3 - A26 (South)		ONE HOUR	✓	471	100.000
4 - London Road (West)		ONE HOUR	✓	298	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	194	432	13
	2 - London Road (East)	227	0	231	317
	3 - A26 (South)	280	137	0	54
	4 - London Road (West)	8	209	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.51	5.32	1.0	1.5	A	586	880
2 - London Road (East)	0.67	8.50	2.0	3.2	A	711	1067
3 - A26 (South)	0.36	3.96	0.6	2.7	A	432	648
4 - London Road (West)	0.38	6.74	0.6	2.8	A	273	410

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	481	120	320	1465	0.328	479	386	0.0	0.5	3.643	A
2 - London Road (East)	583	146	394	1378	0.423	581	405	0.0	0.7	4.497	A
3 - A26 (South)	355	89	417	1544	0.230	353	558	0.0	0.3	3.020	A
4 - London Road (West)	224	56	483	970	0.231	223	288	0.0	0.3	4.813	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	574	144	383	1429	0.402	574	462	0.5	0.7	4.204	A
2 - London Road (East)	697	174	472	1335	0.522	695	485	0.7	1.1	5.612	A
3 - A26 (South)	423	106	500	1495	0.283	423	668	0.3	0.4	3.357	A
4 - London Road (West)	268	67	578	925	0.290	267	345	0.3	0.4	5.475	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	704	176	469	1381	0.509	702	566	0.7	1.0	5.293	A
2 - London Road (East)	853	213	578	1277	0.668	850	593	1.1	2.0	8.356	A
3 - A26 (South)	519	130	611	1429	0.363	518	817	0.4	0.6	3.947	A
4 - London Road (West)	328	82	707	863	0.380	327	421	0.4	0.6	6.709	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	704	176	470	1380	0.510	704	567	1.0	1.0	5.318	A
2 - London Road (East)	853	213	579	1276	0.669	853	595	2.0	2.0	8.501	A
3 - A26 (South)	519	130	613	1428	0.363	519	819	0.6	0.6	3.958	A
4 - London Road (West)	328	82	709	862	0.380	328	423	0.6	0.6	6.737	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	574	144	385	1428	0.402	576	464	1.0	0.7	4.229	A
2 - London Road (East)	697	174	474	1334	0.522	700	487	2.0	1.1	5.710	A
3 - A26 (South)	423	106	503	1493	0.284	424	671	0.6	0.4	3.371	A
4 - London Road (West)	268	67	581	923	0.290	269	347	0.6	0.4	5.504	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	481	120	322	1464	0.329	482	388	0.7	0.5	3.670	A
2 - London Road (East)	583	146	397	1377	0.424	585	407	1.1	0.7	4.553	A
3 - A26 (South)	355	89	420	1542	0.230	355	561	0.4	0.3	3.032	A
4 - London Road (West)	224	56	486	969	0.232	225	290	0.4	0.3	4.842	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - London Road (East)	0.73	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26 (South)	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - London Road (West)	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.67	0.10	0.83	1.37	1.44			N/A	N/A
2 - London Road (East)	1.08	0.07	0.83	2.00	2.84			N/A	N/A
3 - A26 (South)	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - London Road (West)	0.40	0.00	0.00	0.40	0.40			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.03	0.03	0.26	1.03	1.03			N/A	N/A
2 - London Road (East)	1.96	0.03	0.27	1.96	3.16			N/A	N/A
3 - A26 (South)	0.57	0.03	0.25	0.57	0.57			N/A	N/A
4 - London Road (West)	0.61	0.03	0.25	0.61	0.61			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.03	0.03	0.27	1.03	1.52			N/A	N/A
2 - London Road (East)	1.99	0.03	0.27	1.99	1.99			N/A	N/A
3 - A26 (South)	0.57	0.03	0.30	1.35	2.67			N/A	N/A
4 - London Road (West)	0.61	0.03	0.29	1.29	2.82			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.68	0.30	0.95	1.39	1.45			N/A	N/A
2 - London Road (East)	1.11	0.09	0.97	1.88	2.52			N/A	N/A
3 - A26 (South)	0.40	0.00	0.00	0.40	0.40			N/A	N/A
4 - London Road (West)	0.41	0.00	0.00	0.41	0.41			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.49	0.04	0.45	1.27	1.39			N/A	N/A
2 - London Road (East)	0.74	0.05	0.49	1.41	1.92			N/A	N/A
3 - A26 (South)	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - London Road (West)	0.30	0.00	0.00	0.30	0.30			N/A	N/A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	9.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	528	100.000
2 - London Road (East)		ONE HOUR	✓	365	100.000
3 - A26 (South)		ONE HOUR	✓	879	100.000
4 - London Road (West)		ONE HOUR	✓	529	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	202	319	7
	2 - London Road (East)	49	0	234	82
	3 - A26 (South)	411	406	0	62
	4 - London Road (West)	64	377	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.53	6.87	1.1	2.4	A	485	727
2 - London Road (East)	0.30	3.82	0.4	1.7	A	335	502
3 - A26 (South)	0.57	4.91	1.3	1.7	A	807	1210
4 - London Road (West)	0.78	21.69	3.4	17.3	C	485	728

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	398	99	652	1278	0.311	396	393	0.0	0.4	4.072	A
2 - London Road (East)	275	69	310	1425	0.193	274	737	0.0	0.2	3.124	A
3 - A26 (South)	662	165	104	1730	0.382	659	480	0.0	0.6	3.355	A
4 - London Road (West)	398	100	650	891	0.447	395	113	0.0	0.8	7.218	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	475	119	781	1205	0.394	474	470	0.4	0.6	4.918	A
2 - London Road (East)	328	82	371	1391	0.236	328	883	0.2	0.3	3.386	A
3 - A26 (South)	790	198	124	1718	0.460	789	575	0.6	0.8	3.871	A
4 - London Road (West)	476	119	778	830	0.573	474	136	0.8	1.3	10.045	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	581	145	951	1109	0.524	580	575	0.6	1.1	6.777	A
2 - London Road (East)	402	100	453	1346	0.299	401	1078	0.3	0.4	3.810	A
3 - A26 (South)	968	242	152	1702	0.569	966	703	0.8	1.3	4.882	A
4 - London Road (West)	582	146	952	747	0.780	575	166	1.3	3.2	20.063	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	581	145	958	1105	0.526	581	577	1.1	1.1	6.874	A
2 - London Road (East)	402	100	456	1344	0.299	402	1084	0.4	0.4	3.818	A
3 - A26 (South)	968	242	152	1702	0.569	968	706	1.3	1.3	4.906	A
4 - London Road (West)	582	146	953	746	0.781	582	166	3.2	3.4	21.688	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	475	119	791	1199	0.396	476	473	1.1	0.7	4.992	A
2 - London Road (East)	328	82	375	1389	0.236	329	893	0.4	0.3	3.395	A
3 - A26 (South)	790	198	124	1718	0.460	792	579	1.3	0.9	3.895	A
4 - London Road (West)	476	119	780	829	0.574	484	136	3.4	1.4	10.664	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	398	99	658	1274	0.312	398	395	0.7	0.5	4.114	A
2 - London Road (East)	275	69	313	1423	0.193	275	744	0.3	0.2	3.135	A
3 - A26 (South)	662	165	104	1730	0.383	663	484	0.9	0.6	3.378	A
4 - London Road (West)	398	100	653	889	0.448	400	114	1.4	0.8	7.400	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.45	0.00	0.00	0.45	0.45			N/A	N/A
2 - London Road (East)	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A26 (South)	0.62	0.55	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.80	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.64	0.09	0.81	1.36	1.43			N/A	N/A
2 - London Road (East)	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A26 (South)	0.85	0.08	0.84	1.20	1.67			N/A	N/A
4 - London Road (West)	1.31	0.06	0.86	2.82	3.95			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.09	0.03	0.26	1.09	1.09			N/A	N/A
2 - London Road (East)	0.42	0.03	0.25	0.45	0.48			N/A	N/A
3 - A26 (South)	1.30	0.03	0.26	1.30	1.30			N/A	N/A
4 - London Road (West)	3.22	0.03	0.33	6.52	17.26			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.10	0.03	0.27	1.10	2.37			N/A	N/A
2 - London Road (East)	0.42	0.03	0.32	1.35	1.67			N/A	N/A
3 - A26 (South)	1.31	0.03	0.26	1.31	1.31			N/A	N/A
4 - London Road (West)	3.37	0.03	0.30	3.37	14.58			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.66	0.14	0.89	1.38	1.44			N/A	N/A
2 - London Road (East)	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A26 (South)	0.86	0.39	0.97	1.41	1.46			N/A	N/A
4 - London Road (West)	1.38	0.05	0.47	3.51	5.52			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.46	0.04	0.39	1.22	1.36			N/A	N/A
2 - London Road (East)	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A26 (South)	0.62	0.07	0.75	1.35	1.43			N/A	N/A
4 - London Road (West)	0.82	0.03	0.34	1.90	3.80			N/A	N/A

2039 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	673	100.000
2 - London Road (East)		ONE HOUR	✓	802	100.000
3 - A26 (South)		ONE HOUR	✓	524	100.000
4 - London Road (West)		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	206	446	21
	2 - London Road (East)	178	0	212	412
	3 - A26 (South)	289	164	0	71
	4 - London Road (West)	7	227	95	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.55	5.97	1.2	1.5	A	618	926
2 - London Road (East)	0.70	9.68	2.3	6.2	A	736	1104
3 - A26 (South)	0.41	4.41	0.7	2.8	A	481	721
4 - London Road (West)	0.42	7.10	0.7	2.9	A	302	453

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	507	127	364	1440	0.352	505	355	0.0	0.5	3.839	A
2 - London Road (East)	604	151	421	1363	0.443	601	447	0.0	0.8	4.701	A
3 - A26 (South)	394	99	458	1520	0.259	393	564	0.0	0.3	3.189	A
4 - London Road (West)	248	62	473	974	0.254	246	378	0.0	0.3	4.935	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	605	151	436	1399	0.432	604	425	0.5	0.8	4.522	A
2 - London Road (East)	721	180	504	1318	0.547	719	536	0.8	1.2	6.003	A
3 - A26 (South)	471	118	548	1467	0.321	471	676	0.3	0.5	3.612	A
4 - London Road (West)	296	74	566	930	0.318	295	452	0.3	0.5	5.665	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	741	185	534	1344	0.551	739	520	0.8	1.2	5.930	A
2 - London Road (East)	883	221	617	1255	0.703	879	656	1.2	2.3	9.446	A
3 - A26 (South)	577	144	669	1395	0.414	576	826	0.5	0.7	4.393	A
4 - London Road (West)	362	91	693	870	0.416	361	552	0.5	0.7	7.063	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	741	185	535	1344	0.551	741	522	1.2	1.2	5.972	A
2 - London Road (East)	883	221	619	1254	0.704	883	657	2.3	2.3	9.675	A
3 - A26 (South)	577	144	673	1393	0.414	577	829	0.7	0.7	4.412	A
4 - London Road (West)	362	91	695	869	0.417	362	555	0.7	0.7	7.100	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	605	151	438	1398	0.433	607	428	1.2	0.8	4.559	A
2 - London Road (East)	721	180	507	1316	0.548	725	538	2.3	1.2	6.139	A
3 - A26 (South)	471	118	553	1464	0.322	472	680	0.7	0.5	3.631	A
4 - London Road (West)	296	74	569	929	0.318	297	456	0.7	0.5	5.704	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	507	127	367	1439	0.352	508	358	0.8	0.5	3.869	A
2 - London Road (East)	604	151	424	1362	0.443	605	450	1.2	0.8	4.769	A
3 - A26 (South)	394	99	461	1518	0.260	395	568	0.5	0.4	3.208	A
4 - London Road (West)	248	62	476	973	0.255	248	380	0.5	0.3	4.968	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.79	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26 (South)	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4 - London Road (West)	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.76	0.09	0.83	1.42	1.49			N/A	N/A
2 - London Road (East)	1.19	0.06	0.79	2.55	3.58			N/A	N/A
3 - A26 (South)	0.47	0.00	0.00	0.47	0.47			N/A	N/A
4 - London Road (West)	0.46	0.00	0.00	0.46	0.46			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.21	0.03	0.26	1.21	1.21			N/A	N/A
2 - London Road (East)	2.29	0.03	0.28	2.29	6.16			N/A	N/A
3 - A26 (South)	0.70	0.03	0.25	0.70	0.70			N/A	N/A
4 - London Road (West)	0.70	0.03	0.26	0.70	0.70			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.22	0.03	0.27	1.22	1.22			N/A	N/A
2 - London Road (East)	2.33	0.03	0.27	2.33	2.66			N/A	N/A
3 - A26 (South)	0.70	0.03	0.28	0.92	2.80			N/A	N/A
4 - London Road (West)	0.71	0.03	0.29	1.05	2.94			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.77	0.22	0.94	1.39	1.45			N/A	N/A
2 - London Road (East)	1.23	0.07	0.94	2.45	3.31			N/A	N/A
3 - A26 (South)	0.48	0.00	0.00	0.48	0.48			N/A	N/A
4 - London Road (West)	0.47	0.00	0.00	0.47	0.47			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.55	0.05	0.57	1.32	1.41			N/A	N/A
2 - London Road (East)	0.80	0.04	0.44	1.74	2.62			N/A	N/A
3 - A26 (South)	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4 - London Road (West)	0.34	0.00	0.00	0.34	0.34			N/A	N/A

2039 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	18.61	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	605	100.000
2 - London Road (East)		ONE HOUR	✓	398	100.000
3 - A26 (South)		ONE HOUR	✓	796	100.000
4 - London Road (West)		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	236	361	8
	2 - London Road (East)	71	0	220	107
	3 - A26 (South)	329	402	0	65
	4 - London Road (West)	78	463	120	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.64	9.69	1.8	3.0	A	555	833
2 - London Road (East)	0.34	4.18	0.5	2.3	A	365	548
3 - A26 (South)	0.52	4.53	1.1	1.5	A	730	1096
4 - London Road (West)	0.93	52.43	9.9	49.8	F	607	910

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	455	114	736	1230	0.370	453	358	0.0	0.6	4.619	A
2 - London Road (East)	300	75	366	1394	0.215	299	824	0.0	0.3	3.283	A
3 - A26 (South)	599	150	140	1709	0.351	597	525	0.0	0.5	3.233	A
4 - London Road (West)	498	124	602	913	0.545	493	135	0.0	1.2	8.471	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	544	136	882	1148	0.474	543	429	0.6	0.9	5.932	A
2 - London Road (East)	358	89	438	1354	0.264	357	986	0.3	0.4	3.612	A
3 - A26 (South)	716	179	167	1693	0.423	715	629	0.5	0.7	3.676	A
4 - London Road (West)	594	149	720	857	0.693	590	162	1.2	2.2	13.294	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	666	167	1062	1046	0.637	663	523	0.9	1.7	9.306	A
2 - London Road (East)	438	110	532	1302	0.336	438	1193	0.4	0.5	4.160	A
3 - A26 (South)	876	219	204	1670	0.525	875	765	0.7	1.1	4.518	A
4 - London Road (West)	728	182	882	780	0.933	703	198	2.2	8.3	38.361	E

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	666	167	1079	1037	0.642	666	526	1.7	1.8	9.685	A
2 - London Road (East)	438	110	537	1300	0.337	438	1208	0.5	0.5	4.179	A
3 - A26 (South)	876	219	205	1670	0.525	876	770	1.1	1.1	4.534	A
4 - London Road (West)	728	182	883	780	0.933	721	198	8.3	9.9	52.427	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	544	136	913	1131	0.481	547	434	1.8	0.9	6.202	A
2 - London Road (East)	358	89	447	1349	0.265	358	1013	0.5	0.4	3.637	A
3 - A26 (South)	716	179	168	1692	0.423	717	638	1.1	0.7	3.698	A
4 - London Road (West)	594	149	722	856	0.694	624	162	9.9	2.4	17.346	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	455	114	746	1225	0.372	457	361	0.9	0.6	4.696	A
2 - London Road (East)	300	75	370	1392	0.215	300	833	0.4	0.3	3.297	A
3 - A26 (South)	599	150	140	1708	0.351	600	530	0.7	0.5	3.251	A
4 - London Road (West)	498	124	605	912	0.546	502	136	2.4	1.2	8.883	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.58	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3 - A26 (South)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	1.17	0.55	1.09	1.38	1.70			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.89	0.07	0.82	1.46	1.85			N/A	N/A
2 - London Road (East)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A26 (South)	0.73	0.09	0.83	1.40	1.47			N/A	N/A
4 - London Road (West)	2.16	0.06	0.83	5.63	8.52			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.70	0.03	0.27	1.70	2.53			N/A	N/A
2 - London Road (East)	0.50	0.03	0.25	0.50	0.50			N/A	N/A
3 - A26 (South)	1.09	0.03	0.26	1.09	1.09			N/A	N/A
4 - London Road (West)	8.26	0.08	1.95	23.30	35.39			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.76	0.03	0.27	1.76	2.99			N/A	N/A
2 - London Road (East)	0.51	0.03	0.30	1.40	2.30			N/A	N/A
3 - A26 (South)	1.10	0.03	0.27	1.10	1.30			N/A	N/A
4 - London Road (West)	9.91	0.06	1.01	28.88	49.77			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.94	0.09	0.91	1.47	1.83			N/A	N/A
2 - London Road (East)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A26 (South)	0.74	0.51	0.98	1.40	1.45			N/A	N/A
4 - London Road (West)	2.39	0.04	0.39	6.33	12.14			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.60	0.04	0.45	1.42	1.42			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.54	0.06	0.67	1.33	1.42			N/A	N/A
4 - London Road (West)	1.23	0.03	0.30	1.52	5.80			N/A	N/A

2039 with Downlands Farm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	8.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	690	100.000
2 - London Road (East)		ONE HOUR	✓	844	100.000
3 - A26 (South)		ONE HOUR	✓	557	100.000
4 - London Road (West)		ONE HOUR	✓	316	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	26	194	449	21
	2 - London Road (East)	189	0	239	416
	3 - A26 (South)	281	207	0	69
	4 - London Road (West)	7	213	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.57	6.37	1.3	1.5	A	633	950
2 - London Road (East)	0.75	11.68	2.9	11.6	B	774	1162
3 - A26 (South)	0.45	4.78	0.8	2.6	A	511	767
4 - London Road (West)	0.42	7.44	0.7	3.0	A	290	435

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	519	130	387	1427	0.364	517	377	0.0	0.6	3.945	A
2 - London Road (East)	635	159	444	1351	0.470	632	460	0.0	0.9	4.982	A
3 - A26 (South)	419	105	488	1502	0.279	418	587	0.0	0.4	3.316	A
4 - London Road (West)	238	59	527	949	0.251	237	379	0.0	0.3	5.045	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	620	155	463	1384	0.448	619	451	0.6	0.8	4.700	A
2 - London Road (East)	759	190	531	1303	0.582	757	551	0.9	1.4	6.571	A
3 - A26 (South)	501	125	585	1445	0.347	500	703	0.4	0.5	3.808	A
4 - London Road (West)	284	71	631	899	0.316	284	454	0.3	0.5	5.840	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	760	190	567	1326	0.573	758	552	0.8	1.3	6.313	A
2 - London Road (East)	929	232	650	1237	0.751	923	674	1.4	2.9	11.252	B
3 - A26 (South)	613	153	713	1369	0.448	612	860	0.5	0.8	4.752	A
4 - London Road (West)	348	87	772	833	0.418	347	554	0.5	0.7	7.397	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	760	190	568	1325	0.573	760	554	1.3	1.3	6.366	A
2 - London Road (East)	929	232	652	1236	0.752	929	676	2.9	2.9	11.684	B
3 - A26 (South)	613	153	718	1366	0.449	613	863	0.8	0.8	4.781	A
4 - London Road (West)	348	87	774	832	0.418	348	557	0.7	0.7	7.442	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	620	155	465	1383	0.448	622	454	1.3	0.8	4.746	A
2 - London Road (East)	759	190	534	1301	0.583	765	554	2.9	1.4	6.787	A
3 - A26 (South)	501	125	591	1441	0.347	502	708	0.8	0.5	3.838	A
4 - London Road (West)	284	71	634	898	0.316	285	458	0.7	0.5	5.883	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	519	130	389	1426	0.364	520	379	0.8	0.6	3.981	A
2 - London Road (East)	635	159	447	1349	0.471	638	463	1.4	0.9	5.072	A
3 - A26 (South)	419	105	492	1500	0.280	420	592	0.5	0.4	3.335	A
4 - London Road (West)	238	59	530	947	0.251	238	382	0.5	0.3	5.083	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.57	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.88	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26 (South)	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - London Road (West)	0.33	0.00	0.00	0.33	0.33			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.80	0.09	0.84	1.44	1.44			N/A	N/A
2 - London Road (East)	1.37	0.06	0.72	3.20	4.71			N/A	N/A
3 - A26 (South)	0.53	0.53	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.46	0.00	0.00	0.46	0.46			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.32	0.03	0.26	1.32	1.32			N/A	N/A
2 - London Road (East)	2.88	0.03	0.29	2.88	11.65			N/A	N/A
3 - A26 (South)	0.80	0.03	0.25	0.80	0.80			N/A	N/A
4 - London Road (West)	0.71	0.03	0.26	0.71	0.71			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.33	0.03	0.27	1.33	1.33			N/A	N/A
2 - London Road (East)	2.95	0.03	0.28	2.95	5.50			N/A	N/A
3 - A26 (South)	0.81	0.03	0.28	0.81	2.59			N/A	N/A
4 - London Road (West)	0.71	0.03	0.29	1.09	2.99			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.82	0.18	0.93	1.42	1.48			N/A	N/A
2 - London Road (East)	1.42	0.06	0.80	3.29	4.76			N/A	N/A
3 - A26 (South)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.47	0.00	0.00	0.47	0.47			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.58	0.06	0.59	1.33	1.42			N/A	N/A
2 - London Road (East)	0.90	0.04	0.39	2.14	3.61			N/A	N/A
3 - A26 (South)	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - London Road (West)	0.34	0.00	0.00	0.34	0.34			N/A	N/A

2039 with Downlands Farm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	23.87	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	641	100.000
2 - London Road (East)		ONE HOUR	✓	404	100.000
3 - A26 (South)		ONE HOUR	✓	798	100.000
4 - London Road (West)		ONE HOUR	✓	675	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	23	250	360	8
	2 - London Road (East)	70	0	227	107
	3 - A26 (South)	327	406	0	65
	4 - London Road (West)	78	467	130	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.69	11.10	2.1	5.5	B	588	882
2 - London Road (East)	0.35	4.31	0.5	2.5	A	371	556
3 - A26 (South)	0.53	4.63	1.1	1.5	A	732	1098
4 - London Road (West)	0.97	70.47	13.9	59.1	F	619	929

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	483	121	750	1223	0.395	480	373	0.0	0.6	4.831	A
2 - London Road (East)	304	76	390	1381	0.220	303	840	0.0	0.3	3.337	A
3 - A26 (South)	601	150	156	1699	0.354	599	537	0.0	0.5	3.264	A
4 - London Road (West)	508	127	620	905	0.562	503	135	0.0	1.3	8.855	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	576	144	897	1139	0.506	575	447	0.6	1.0	6.358	A
2 - London Road (East)	363	91	467	1338	0.271	363	1005	0.3	0.4	3.690	A
3 - A26 (South)	717	179	187	1681	0.427	717	643	0.5	0.7	3.729	A
4 - London Road (West)	607	152	742	847	0.717	602	162	1.3	2.4	14.446	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	706	176	1074	1040	0.679	702	544	1.0	2.0	10.521	B
2 - London Road (East)	445	111	565	1284	0.346	444	1211	0.4	0.5	4.283	A
3 - A26 (South)	879	220	229	1656	0.531	877	780	0.7	1.1	4.611	A
4 - London Road (West)	743	186	908	768	0.968	710	198	2.4	10.7	46.654	E

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	706	176	1093	1029	0.686	705	547	2.0	2.1	11.098	B
2 - London Road (East)	445	111	571	1281	0.347	445	1227	0.5	0.5	4.305	A
3 - A26 (South)	879	220	229	1656	0.531	879	787	1.1	1.1	4.631	A
4 - London Road (West)	743	186	909	767	0.969	730	198	10.7	13.9	70.465	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	576	144	942	1114	0.517	580	454	2.1	1.1	6.795	A
2 - London Road (East)	363	91	480	1331	0.273	364	1043	0.5	0.4	3.722	A
3 - A26 (South)	717	179	187	1680	0.427	719	656	1.1	0.8	3.748	A
4 - London Road (West)	607	152	744	846	0.718	652	162	13.9	2.7	22.306	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	483	121	760	1217	0.397	484	376	1.1	0.7	4.928	A
2 - London Road (East)	304	76	394	1378	0.221	305	850	0.4	0.3	3.353	A
3 - A26 (South)	601	150	157	1699	0.354	602	542	0.8	0.6	3.283	A
4 - London Road (West)	508	127	623	903	0.563	514	136	2.7	1.3	9.365	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.65	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	1.25	0.54	1.17	1.66	1.86			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.01	0.07	0.82	1.85	2.55			N/A	N/A
2 - London Road (East)	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - A26 (South)	0.74	0.09	0.83	1.40	1.48			N/A	N/A
4 - London Road (West)	2.40	0.06	0.87	6.34	9.65			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	2.04	0.03	0.28	2.04	5.52			N/A	N/A
2 - London Road (East)	0.53	0.03	0.25	0.53	0.53			N/A	N/A
3 - A26 (South)	1.12	0.03	0.26	1.12	1.12			N/A	N/A
4 - London Road (West)	10.71	0.16	4.72	27.96	39.43			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	2.13	0.03	0.27	2.13	4.13			N/A	N/A
2 - London Road (East)	0.53	0.03	0.30	1.38	2.45			N/A	N/A
3 - A26 (South)	1.12	0.03	0.27	1.12	1.27			N/A	N/A
4 - London Road (West)	13.92	0.11	3.94	39.35	59.06			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.09	0.08	0.92	1.91	2.61			N/A	N/A
2 - London Road (East)	0.38	0.00	0.00	0.38	0.38			N/A	N/A
3 - A26 (South)	0.75	0.51	0.98	1.40	1.45			N/A	N/A
4 - London Road (West)	2.71	0.04	0.38	7.12	14.10			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.66	0.04	0.42	1.33	1.93			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.55	0.06	0.67	1.34	1.42			N/A	N/A
4 - London Road (West)	1.31	0.03	0.29	1.31	5.80			N/A	N/A

2039 with All Developments, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	8.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	701	100.000
2 - London Road (East)		ONE HOUR	✓	863	100.000
3 - A26 (South)		ONE HOUR	✓	552	100.000
4 - London Road (West)		ONE HOUR	✓	307	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	26	192	459	24
	2 - London Road (East)	204	0	237	422
	3 - A26 (South)	262	223	0	67
	4 - London Road (West)	7	204	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.58	6.56	1.4	1.6	A	643	965
2 - London Road (East)	0.77	12.87	3.3	14.6	B	792	1188
3 - A26 (South)	0.45	4.85	0.8	2.6	A	507	760
4 - London Road (West)	0.41	7.39	0.7	3.0	A	282	423

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	528	132	392	1424	0.370	525	374	0.0	0.6	3.993	A
2 - London Road (East)	650	162	453	1346	0.483	646	464	0.0	0.9	5.119	A
3 - A26 (South)	416	104	506	1492	0.279	414	593	0.0	0.4	3.337	A
4 - London Road (West)	231	58	536	945	0.245	230	384	0.0	0.3	5.027	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	630	158	469	1381	0.456	629	448	0.6	0.8	4.784	A
2 - London Road (East)	776	194	543	1296	0.599	774	556	0.9	1.5	6.859	A
3 - A26 (South)	496	124	606	1432	0.346	496	711	0.4	0.5	3.841	A
4 - London Road (West)	276	69	642	894	0.309	276	460	0.3	0.4	5.811	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	772	193	574	1322	0.584	770	547	0.8	1.4	6.497	A
2 - London Road (East)	950	238	664	1229	0.773	943	680	1.5	3.2	12.287	B
3 - A26 (South)	608	152	739	1353	0.449	607	868	0.5	0.8	4.814	A
4 - London Road (West)	338	85	785	827	0.409	337	561	0.4	0.7	7.339	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	772	193	576	1321	0.584	772	549	1.4	1.4	6.557	A
2 - London Road (East)	950	238	666	1228	0.774	950	681	3.2	3.3	12.874	B
3 - A26 (South)	608	152	744	1350	0.450	608	872	0.8	0.8	4.846	A
4 - London Road (West)	338	85	787	825	0.410	338	565	0.7	0.7	7.387	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	630	158	472	1380	0.457	632	451	1.4	0.8	4.833	A
2 - London Road (East)	776	194	546	1295	0.599	783	558	3.3	1.5	7.128	A
3 - A26 (South)	496	124	613	1428	0.347	497	716	0.8	0.5	3.873	A
4 - London Road (West)	276	69	646	893	0.309	277	465	0.7	0.5	5.858	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	528	132	394	1423	0.371	529	377	0.8	0.6	4.030	A
2 - London Road (East)	650	162	456	1344	0.483	652	467	1.5	0.9	5.220	A
3 - A26 (South)	416	104	511	1489	0.279	416	598	0.5	0.4	3.359	A
4 - London Road (West)	231	58	539	943	0.245	232	387	0.5	0.3	5.065	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.58	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.92	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26 (South)	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - London Road (West)	0.32	0.00	0.00	0.32	0.32			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.83	0.08	0.84	1.08	1.59			N/A	N/A
2 - London Road (East)	1.46	0.05	0.67	3.56	5.27			N/A	N/A
3 - A26 (South)	0.53	0.53	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.44	0.00	0.00	0.44	0.44			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.38	0.03	0.26	1.38	1.38			N/A	N/A
2 - London Road (East)	3.21	0.03	0.30	3.23	14.61			N/A	N/A
3 - A26 (South)	0.81	0.03	0.25	0.81	0.81			N/A	N/A
4 - London Road (West)	0.68	0.03	0.26	0.68	0.68			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.39	0.03	0.27	1.39	1.39			N/A	N/A
2 - London Road (East)	3.31	0.03	0.28	3.31	7.79			N/A	N/A
3 - A26 (South)	0.81	0.03	0.28	0.81	2.61			N/A	N/A
4 - London Road (West)	0.69	0.03	0.29	1.16	2.97			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.85	0.16	0.94	1.02	1.02			N/A	N/A
2 - London Road (East)	1.52	0.06	0.70	3.72	5.54			N/A	N/A
3 - A26 (South)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.45	0.00	0.00	0.45	0.45			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.59	0.06	0.59	1.34	1.43			N/A	N/A
2 - London Road (East)	0.95	0.04	0.37	2.34	4.06			N/A	N/A
3 - A26 (South)	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - London Road (West)	0.33	0.00	0.00	0.33	0.33			N/A	N/A

2039 with All Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	31.72	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	661	100.000
2 - London Road (East)		ONE HOUR	✓	398	100.000
3 - A26 (South)		ONE HOUR	✓	802	100.000
4 - London Road (West)		ONE HOUR	✓	702	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	21	286	346	8
	2 - London Road (East)	67	0	228	103
	3 - A26 (South)	319	418	0	65
	4 - London Road (West)	79	482	141	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.72	12.61	2.5	8.7	B	607	910
2 - London Road (East)	0.34	4.25	0.5	2.4	A	365	548
3 - A26 (South)	0.53	4.62	1.1	1.5	A	736	1104
4 - London Road (West)	1.01	96.24	20.7	68.4	F	644	966

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	498	124	778	1207	0.412	495	364	0.0	0.7	5.037	A
2 - London Road (East)	300	75	386	1383	0.217	299	887	0.0	0.3	3.317	A
3 - A26 (South)	604	151	149	1703	0.355	602	535	0.0	0.5	3.261	A
4 - London Road (West)	529	132	619	905	0.584	523	132	0.0	1.4	9.291	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	594	149	931	1121	0.530	593	436	0.7	1.1	6.794	A
2 - London Road (East)	358	89	462	1341	0.267	357	1061	0.3	0.4	3.660	A
3 - A26 (South)	721	180	179	1686	0.428	720	641	0.5	0.7	3.725	A
4 - London Road (West)	631	158	741	847	0.745	626	158	1.4	2.7	15.853	C

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	728	182	1104	1023	0.712	723	529	1.1	2.4	11.807	B
2 - London Road (East)	438	110	556	1289	0.340	438	1271	0.4	0.5	4.225	A
3 - A26 (South)	883	221	219	1662	0.531	882	775	0.7	1.1	4.603	A
4 - London Road (West)	773	193	907	768	1.006	726	193	2.7	14.3	57.072	F

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	728	182	1124	1012	0.719	727	532	2.4	2.5	12.609	B
2 - London Road (East)	438	110	563	1285	0.341	438	1288	0.5	0.5	4.249	A
3 - A26 (South)	883	221	219	1662	0.531	883	782	1.1	1.1	4.622	A
4 - London Road (West)	773	193	908	768	1.007	748	194	14.3	20.7	96.240	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	594	149	999	1082	0.549	599	446	2.5	1.2	7.529	A
2 - London Road (East)	358	89	481	1331	0.269	358	1117	0.5	0.4	3.704	A
3 - A26 (South)	721	180	179	1685	0.428	722	660	1.1	0.8	3.744	A
4 - London Road (West)	631	158	743	846	0.746	701	159	20.7	3.2	34.106	D

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	498	124	790	1200	0.415	500	367	1.2	0.7	5.159	A
2 - London Road (East)	300	75	391	1380	0.217	300	899	0.4	0.3	3.333	A
3 - A26 (South)	604	151	150	1703	0.355	605	541	0.8	0.6	3.280	A
4 - London Road (West)	529	132	622	904	0.585	536	133	3.2	1.4	9.955	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.70	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.55	0.55	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	1.37	0.50	1.26	1.87	2.19			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.11	0.06	0.80	2.24	3.07			N/A	N/A
2 - London Road (East)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A26 (South)	0.74	0.09	0.83	1.41	1.48			N/A	N/A
4 - London Road (West)	2.74	0.06	0.97	7.32	11.15			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	2.36	0.03	0.29	2.36	8.65			N/A	N/A
2 - London Road (East)	0.51	0.03	0.25	0.51	0.51			N/A	N/A
3 - A26 (South)	1.12	0.03	0.26	1.12	1.12			N/A	N/A
4 - London Road (West)	14.35	0.55	8.99	33.46	44.23			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	2.48	0.03	0.28	2.48	5.83			N/A	N/A
2 - London Road (East)	0.52	0.03	0.30	1.39	2.36			N/A	N/A
3 - A26 (South)	1.13	0.03	0.27	1.13	1.25			N/A	N/A
4 - London Road (West)	20.70	0.46	12.00	50.69	68.38			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.24	0.07	0.93	2.51	3.41			N/A	N/A
2 - London Road (East)	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - A26 (South)	0.75	0.51	0.98	1.40	1.45			N/A	N/A
4 - London Road (West)	3.21	0.04	0.39	8.47	16.91			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.72	0.04	0.39	1.62	2.56			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.55	0.06	0.68	1.34	1.42			N/A	N/A
4 - London Road (West)	1.44	0.03	0.29	1.44	5.86			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: M02a-Black Down Roundabout Jacobs 22-02-18.j9
Path: C:\Users\JoeEarp\OneDrive - Motion\TP Projects\gluckf 2001061\Analysis\Junction Modelling
Report generation date: 18/02/2022 10:59:47

»2018 Baseline, AM
»2018 Baseline, PM
»2039 Baseline, AM
»2039 Baseline, PM
»2039 with Downlands Farm, AM
»2039 with Downlands Farm, PM
»2039 with All Developments, AM
»2039 with All Developments, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2018 Baseline							
1 - A26	D1	5.0	23.05	0.85	D2	2.2	10.42	0.69
2 - A22 (South)		1.7	5.89	0.63		1.4	5.52	0.58
3 - A22 (West)		71.9	162.13	1.09		134.7	336.71	1.18
	2039 Baseline							
1 - A26	D3	5.2	23.72	0.85	D4	2.2	10.36	0.69
2 - A22 (South)		1.7	5.90	0.63		1.4	5.49	0.58
3 - A22 (West)		71.3	161.11	1.09		134.4	335.36	1.18
	2039 with Downlands Farm							
1 - A26	D5	6.2	27.49	0.87	D6	2.4	11.05	0.71
2 - A22 (South)		1.7	5.82	0.63		1.4	5.68	0.59
3 - A22 (West)		68.9	159.34	1.09		134.5	336.51	1.18
	2039 with All Developments							
1 - A26	D7	7.0	30.95	0.89	D8	2.3	10.88	0.70
2 - A22 (South)		1.7	5.90	0.63		1.4	5.60	0.59
3 - A22 (West)		71.8	165.96	1.09		138.3	347.56	1.18

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Black Down Roundabout
Location	Uckfield, East Sussex
Site number	
Date	27/10/2021
Version	
Status	(new file)
Identifier	
Client	Gleeson Strategic Land
Jobnumber	gluckf/2001061
Enumerator	MOTION\JoeEarp
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	78.33	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A26	
2	A22 (South)	
3	A22 (West)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A26	3.30	5.30	17.0	37.0	60.0	27.0	
2 - A22 (South)	3.80	8.60	12.4	37.0	60.0	14.5	
3 - A22 (West)	3.70	5.50	3.9	30.5	60.0	18.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A26	0.529	1488
2 - A22 (South)	0.618	1938
3 - A22 (West)	0.524	1420

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	753	100.000
2 - A22 (South)		ONE HOUR	✓	942	100.000
3 - A22 (West)		ONE HOUR	✓	1311	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	325	428
	2 - A22 (South)	167	0	775
	3 - A22 (West)	358	953	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.85	23.05	5.0	25.1	C	691	1036
2 - A22 (South)	0.63	5.89	1.7	2.5	A	864	1297
3 - A22 (West)	1.09	162.13	71.9	137.1	F	1203	1804

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	567	142	710	1112	0.510	563	392	0.0	1.0	6.507	A
2 - A22 (South)	709	177	320	1741	0.407	706	953	0.0	0.7	3.473	A
3 - A22 (West)	987	247	125	1354	0.729	977	901	0.0	2.6	9.299	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	677	169	846	1040	0.651	674	468	1.0	1.8	9.747	A
2 - A22 (South)	847	212	383	1702	0.498	846	1137	0.7	1.0	4.200	A
3 - A22 (West)	1179	295	150	1341	0.879	1164	1079	2.6	6.2	18.916	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	829	207	948	986	0.841	818	540	1.8	4.6	20.157	C
2 - A22 (South)	1037	259	465	1651	0.628	1034	1301	1.0	1.7	5.813	A
3 - A22 (West)	1443	361	183	1324	1.090	1305	1316	6.2	40.9	76.338	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	829	207	959	980	0.846	827	544	4.6	5.0	23.054	C
2 - A22 (South)	1037	259	470	1648	0.630	1037	1316	1.7	1.7	5.894	A
3 - A22 (West)	1443	361	184	1323	1.091	1320	1324	40.9	71.9	162.128	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	677	169	961	979	0.691	688	512	5.0	2.3	12.782	B
2 - A22 (South)	847	212	391	1697	0.499	850	1258	1.7	1.0	4.264	A
3 - A22 (West)	1179	295	151	1341	0.879	1322	1090	71.9	35.9	149.194	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	567	142	814	1057	0.536	572	432	2.3	1.2	7.482	A
2 - A22 (South)	709	177	325	1738	0.408	710	1060	1.0	0.7	3.511	A
3 - A22 (West)	987	247	126	1354	0.729	1119	909	35.9	2.8	24.679	C

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.02	0.55	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	2.59	0.23	1.56	4.97	6.42			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.81	0.06	0.79	4.56	6.80			N/A	N/A
2 - A22 (South)	0.98	0.07	0.80	1.81	2.47			N/A	N/A
3 - A22 (West)	6.20	0.10	2.13	16.52	23.91			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	4.64	0.04	0.37	11.35	25.07			N/A	N/A
2 - A22 (South)	1.66	0.03	0.26	1.66	1.66			N/A	N/A
3 - A22 (West)	40.93	11.13	36.19	71.36	84.21			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	5.04	0.03	0.31	6.40	24.36			N/A	N/A
2 - A22 (South)	1.68	0.03	0.26	1.68	1.68			N/A	N/A
3 - A22 (West)	71.86	24.95	65.78	118.35	137.05			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.33	0.05	0.74	6.22	9.65			N/A	N/A
2 - A22 (South)	1.01	0.17	1.01	1.39	1.74			N/A	N/A
3 - A22 (West)	35.89	10.99	32.18	60.58	70.81			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.18	0.03	0.34	2.75	5.90			N/A	N/A
2 - A22 (South)	0.69	0.06	0.67	1.23	1.23			N/A	N/A
3 - A22 (West)	2.85	0.03	0.30	2.85	12.67			N/A	N/A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	168.51	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	700	100.000
2 - A22 (South)		ONE HOUR	✓	834	100.000
3 - A22 (West)		ONE HOUR	✓	1466	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	159	541
	2 - A22 (South)	83	0	751
	3 - A22 (West)	714	752	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.69	10.42	2.2	6.0	B	642	963
2 - A22 (South)	0.58	5.52	1.4	1.7	A	765	1148
3 - A22 (West)	1.18	336.71	134.7	200.0	F	1345	2018

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	527	132	559	1192	0.442	524	593	0.0	0.8	5.363	A
2 - A22 (South)	628	157	405	1688	0.372	626	678	0.0	0.6	3.381	A
3 - A22 (West)	1104	276	62	1387	0.796	1089	968	0.0	3.7	11.571	B

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	629	157	659	1139	0.553	628	700	0.8	1.2	7.016	A
2 - A22 (South)	750	187	485	1638	0.458	749	802	0.6	0.8	4.042	A
3 - A22 (West)	1318	329	75	1381	0.955	1285	1159	3.7	11.9	30.342	D

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	771	193	701	1117	0.690	767	756	1.2	2.1	10.173	B
2 - A22 (South)	918	230	593	1572	0.584	916	875	0.8	1.4	5.470	A
3 - A22 (West)	1614	404	91	1372	1.176	1366	1418	11.9	74.0	122.766	F

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	771	193	703	1116	0.691	771	759	2.1	2.2	10.420	B
2 - A22 (South)	918	230	596	1570	0.585	918	878	1.4	1.4	5.521	A
3 - A22 (West)	1614	404	91	1372	1.177	1371	1422	74.0	134.7	279.990	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	629	157	703	1116	0.564	633	742	2.2	1.3	7.506	A
2 - A22 (South)	750	187	489	1636	0.458	752	847	1.4	0.9	4.081	A
3 - A22 (West)	1318	329	75	1381	0.955	1370	1166	134.7	121.6	336.713	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	527	132	706	1114	0.473	529	733	1.3	0.9	6.165	A
2 - A22 (South)	628	157	409	1686	0.372	629	826	0.9	0.6	3.408	A
3 - A22 (West)	1104	276	63	1387	0.796	1376	975	121.6	53.6	231.388	F

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.78	0.55	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	3.65	0.07	1.42	9.70	14.35			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.21	0.07	0.91	2.44	3.31			N/A	N/A
2 - A22 (South)	0.84	0.08	0.81	1.23	1.70			N/A	N/A
3 - A22 (West)	11.85	0.27	6.40	29.27	39.87			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.15	0.03	0.28	2.15	5.98			N/A	N/A
2 - A22 (South)	1.39	0.03	0.26	1.39	1.39			N/A	N/A
3 - A22 (West)	73.96	35.25	70.20	109.59	122.91			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.19	0.03	0.27	2.19	2.61			N/A	N/A
2 - A22 (South)	1.40	0.03	0.27	1.40	1.40			N/A	N/A
3 - A22 (West)	134.72	>199	>199	>199	>199			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.32	0.08	0.99	2.65	3.59			N/A	N/A
2 - A22 (South)	0.85	0.24	0.96	1.42	1.48			N/A	N/A
3 - A22 (West)	121.61	60.85	116.26	177.57	198.17			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.91	0.05	0.49	1.89	2.79			N/A	N/A
2 - A22 (South)	0.60	0.06	0.65	1.34	1.42			N/A	N/A
3 - A22 (West)	53.62	23.63	50.37	81.45	92.09			N/A	N/A

2039 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	77.97	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	756	100.000
2 - A22 (South)		ONE HOUR	✓	942	100.000
3 - A22 (West)		ONE HOUR	✓	1310	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	327	429
	2 - A22 (South)	167	0	775
	3 - A22 (West)	355	955	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.85	23.72	5.2	25.8	C	694	1041
2 - A22 (South)	0.63	5.90	1.7	2.5	A	864	1297
3 - A22 (West)	1.09	161.11	71.3	136.5	F	1202	1803

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	569	142	711	1111	0.512	565	390	0.0	1.0	6.544	A
2 - A22 (South)	709	177	321	1740	0.408	706	956	0.0	0.7	3.474	A
3 - A22 (West)	986	247	125	1354	0.728	976	902	0.0	2.6	9.282	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	680	170	848	1039	0.654	676	465	1.0	1.8	9.841	A
2 - A22 (South)	847	212	384	1701	0.498	846	1141	0.7	1.0	4.202	A
3 - A22 (West)	1178	294	150	1341	0.878	1163	1080	2.6	6.2	18.845	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	832	208	951	985	0.845	821	537	1.8	4.8	20.610	C
2 - A22 (South)	1037	259	466	1650	0.628	1034	1306	1.0	1.7	5.819	A
3 - A22 (West)	1442	361	183	1324	1.090	1304	1317	6.2	40.7	75.961	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	832	208	962	979	0.850	831	541	4.8	5.2	23.720	C
2 - A22 (South)	1037	259	471	1647	0.630	1037	1321	1.7	1.7	5.901	A
3 - A22 (West)	1442	361	184	1323	1.090	1320	1325	40.7	71.3	161.106	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	680	170	964	978	0.695	691	509	5.2	2.4	13.011	B
2 - A22 (South)	847	212	392	1696	0.499	850	1263	1.7	1.0	4.266	A
3 - A22 (West)	1178	294	151	1341	0.878	1322	1091	71.3	35.2	147.595	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	569	142	813	1057	0.538	574	428	2.4	1.2	7.519	A
2 - A22 (South)	709	177	326	1737	0.408	710	1062	1.0	0.7	3.510	A
3 - A22 (West)	986	247	126	1354	0.729	1116	910	35.2	2.8	23.975	C

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.03	0.55	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	2.58	0.23	1.55	4.95	6.39			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.83	0.06	0.78	4.64	6.93			N/A	N/A
2 - A22 (South)	0.98	0.07	0.80	1.81	2.47			N/A	N/A
3 - A22 (West)	6.17	0.10	2.10	16.45	23.83			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	4.77	0.04	0.38	11.94	25.80			N/A	N/A
2 - A22 (South)	1.66	0.03	0.26	1.66	1.66			N/A	N/A
3 - A22 (West)	40.67	10.96	35.93	71.14	84.07			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	5.20	0.03	0.32	7.08	25.58			N/A	N/A
2 - A22 (South)	1.68	0.03	0.26	1.68	1.68			N/A	N/A
3 - A22 (West)	71.34	24.54	65.23	117.79	136.52			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.38	0.05	0.73	6.37	9.89			N/A	N/A
2 - A22 (South)	1.01	0.17	1.01	1.40	1.74			N/A	N/A
3 - A22 (West)	35.18	10.48	31.44	59.77	70.01			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.19	0.03	0.34	2.74	5.97			N/A	N/A
2 - A22 (South)	0.69	0.06	0.67	1.24	1.24			N/A	N/A
3 - A22 (West)	2.84	0.03	0.30	2.84	12.62			N/A	N/A

2039 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	168.09	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	699	100.000
2 - A22 (South)		ONE HOUR	✓	831	100.000
3 - A22 (West)		ONE HOUR	✓	1467	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	158	541
	2 - A22 (South)	80	0	751
	3 - A22 (West)	717	750	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.69	10.36	2.2	5.9	B	641	962
2 - A22 (South)	0.58	5.49	1.4	1.7	A	763	1144
3 - A22 (West)	1.18	335.36	134.4	200.0	F	1346	2019

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	526	132	557	1193	0.441	523	593	0.0	0.8	5.351	A
2 - A22 (South)	626	156	405	1688	0.371	623	675	0.0	0.6	3.374	A
3 - A22 (West)	1104	276	60	1388	0.796	1090	968	0.0	3.7	11.557	B

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	628	157	658	1140	0.551	627	700	0.8	1.2	6.992	A
2 - A22 (South)	747	187	485	1638	0.456	746	799	0.6	0.8	4.030	A
3 - A22 (West)	1319	330	72	1382	0.954	1286	1159	3.7	11.8	30.252	D

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	770	192	699	1118	0.689	766	756	1.2	2.1	10.122	B
2 - A22 (South)	915	229	593	1572	0.582	913	872	0.8	1.4	5.445	A
3 - A22 (West)	1615	404	88	1374	1.176	1367	1418	11.8	73.8	122.353	F

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	770	192	702	1116	0.689	769	759	2.1	2.2	10.364	B
2 - A22 (South)	915	229	596	1570	0.583	915	876	1.4	1.4	5.494	A
3 - A22 (West)	1615	404	88	1374	1.176	1373	1422	73.8	134.4	278.997	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	628	157	701	1117	0.563	632	743	2.2	1.3	7.477	A
2 - A22 (South)	747	187	489	1636	0.457	749	844	1.4	0.8	4.069	A
3 - A22 (West)	1319	330	72	1382	0.954	1372	1166	134.4	121.2	335.358	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	526	132	704	1115	0.472	528	733	1.3	0.9	6.147	A
2 - A22 (South)	626	156	409	1686	0.371	627	823	0.8	0.6	3.401	A
3 - A22 (West)	1104	276	60	1388	0.796	1377	975	121.2	53.1	229.905	F

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.78	0.55	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	3.65	0.08	1.43	9.68	14.29			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.21	0.07	0.91	2.41	3.27			N/A	N/A
2 - A22 (South)	0.83	0.08	0.81	1.20	1.67			N/A	N/A
3 - A22 (West)	11.82	0.27	6.38	29.19	39.76			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.14	0.03	0.28	2.14	5.86			N/A	N/A
2 - A22 (South)	1.37	0.03	0.26	1.37	1.37			N/A	N/A
3 - A22 (West)	73.78	35.11	70.01	109.35	122.64			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.18	0.03	0.27	2.18	2.56			N/A	N/A
2 - A22 (South)	1.39	0.03	0.27	1.39	1.39			N/A	N/A
3 - A22 (West)	134.39	>199	>199	>199	>199			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.31	0.08	1.00	2.62	3.55			N/A	N/A
2 - A22 (South)	0.85	0.24	0.96	1.42	1.47			N/A	N/A
3 - A22 (West)	121.15	60.52	115.80	176.99	197.54			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.90	0.05	0.50	1.88	2.77			N/A	N/A
2 - A22 (South)	0.59	0.06	0.64	1.34	1.42			N/A	N/A
3 - A22 (West)	53.07	23.20	49.80	80.84	91.48			N/A	N/A

2039 with Downlands Farm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	76.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	784	100.000
2 - A22 (South)		ONE HOUR	✓	938	100.000
3 - A22 (West)		ONE HOUR	✓	1280	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	360	424
	2 - A22 (South)	216	0	722
	3 - A22 (West)	341	939	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.87	27.49	6.2	33.2	D	719	1079
2 - A22 (South)	0.63	5.82	1.7	2.4	A	861	1291
3 - A22 (West)	1.09	159.34	68.9	133.2	F	1175	1762

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	590	148	700	1118	0.528	586	416	0.0	1.1	6.717	A
2 - A22 (South)	706	177	317	1742	0.405	703	969	0.0	0.7	3.456	A
3 - A22 (West)	964	241	162	1335	0.722	954	858	0.0	2.5	9.218	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	705	176	834	1046	0.674	701	497	1.1	2.0	10.322	B
2 - A22 (South)	843	211	379	1704	0.495	842	1156	0.7	1.0	4.171	A
3 - A22 (West)	1151	288	194	1318	0.873	1137	1027	2.5	5.9	18.570	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	863	216	936	993	0.870	849	577	2.0	5.6	23.039	C
2 - A22 (South)	1033	258	459	1655	0.624	1030	1326	1.0	1.6	5.741	A
3 - A22 (West)	1409	352	237	1295	1.088	1276	1252	5.9	39.4	75.400	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	863	216	947	987	0.875	861	582	5.6	6.2	27.486	D
2 - A22 (South)	1033	258	465	1651	0.626	1033	1342	1.6	1.7	5.824	A
3 - A22 (West)	1409	352	238	1295	1.088	1291	1260	39.4	68.9	159.339	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	705	176	953	984	0.717	719	541	6.2	2.6	14.267	B
2 - A22 (South)	843	211	389	1698	0.497	846	1283	1.7	1.0	4.237	A
3 - A22 (West)	1151	288	195	1318	0.873	1299	1040	68.9	31.9	142.465	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	590	148	792	1068	0.552	596	451	2.6	1.3	7.705	A
2 - A22 (South)	706	177	322	1739	0.406	707	1066	1.0	0.7	3.495	A
3 - A22 (West)	964	241	163	1334	0.722	1080	867	31.9	2.7	21.112	C

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.10	0.55	1.03	1.45	1.50			N/A	N/A
2 - A22 (South)	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	2.50	0.23	1.50	4.80	6.11			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.00	0.06	0.78	5.13	7.79			N/A	N/A
2 - A22 (South)	0.97	0.07	0.80	1.77	2.38			N/A	N/A
3 - A22 (West)	5.93	0.10	1.93	15.87	23.12			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	5.58	0.04	0.42	15.29	29.65			N/A	N/A
2 - A22 (South)	1.63	0.03	0.26	1.63	1.63			N/A	N/A
3 - A22 (West)	39.36	10.26	34.62	69.36	82.16			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	6.21	0.03	0.34	11.74	33.24			N/A	N/A
2 - A22 (South)	1.66	0.03	0.26	1.66	1.66			N/A	N/A
3 - A22 (West)	68.89	22.99	62.73	114.66	133.20			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.65	0.05	0.70	7.22	11.40			N/A	N/A
2 - A22 (South)	1.00	0.18	1.01	1.34	1.70			N/A	N/A
3 - A22 (West)	31.85	8.37	27.99	55.76	65.98			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.26	0.03	0.33	2.68	6.43			N/A	N/A
2 - A22 (South)	0.69	0.06	0.68	1.13	1.13			N/A	N/A
3 - A22 (West)	2.74	0.03	0.30	2.74	11.94			N/A	N/A

2039 with Downlands Farm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	167.38	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	717	100.000
2 - A22 (South)		ONE HOUR	✓	837	100.000
3 - A22 (West)		ONE HOUR	✓	1463	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	154	563
	2 - A22 (South)	88	0	749
	3 - A22 (West)	709	754	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.71	11.05	2.4	7.6	B	658	987
2 - A22 (South)	0.59	5.68	1.4	1.8	A	768	1152
3 - A22 (West)	1.18	336.51	134.5	200.0	F	1342	2014

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	540	135	560	1191	0.453	537	593	0.0	0.8	5.471	A
2 - A22 (South)	630	158	421	1678	0.376	628	675	0.0	0.6	3.421	A
3 - A22 (West)	1101	275	66	1385	0.795	1087	983	0.0	3.6	11.564	B

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	645	161	661	1138	0.566	643	701	0.8	1.3	7.241	A
2 - A22 (South)	752	188	505	1626	0.463	751	799	0.6	0.9	4.109	A
3 - A22 (West)	1315	329	79	1378	0.954	1283	1177	3.6	11.8	30.303	D

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	789	197	702	1116	0.707	785	757	1.3	2.3	10.745	B
2 - A22 (South)	922	230	617	1557	0.592	919	871	0.9	1.4	5.623	A
3 - A22 (West)	1611	403	97	1369	1.177	1363	1439	11.8	73.8	122.766	F

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	789	197	705	1115	0.708	789	760	2.3	2.4	11.047	B
2 - A22 (South)	922	230	620	1555	0.593	921	875	1.4	1.4	5.681	A
3 - A22 (West)	1611	403	97	1369	1.177	1368	1444	73.8	134.5	280.026	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	645	161	705	1115	0.578	648	742	2.4	1.4	7.787	A
2 - A22 (South)	752	188	509	1624	0.463	755	844	1.4	0.9	4.154	A
3 - A22 (West)	1315	329	79	1378	0.954	1368	1185	134.5	121.3	336.508	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	540	135	708	1113	0.485	542	732	1.4	1.0	6.317	A
2 - A22 (South)	630	158	425	1675	0.376	631	824	0.9	0.6	3.450	A
3 - A22 (West)	1101	275	66	1385	0.795	1374	990	121.3	53.2	230.769	F

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.82	0.55	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	0.60	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	3.64	0.07	1.43	9.67	14.29			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.28	0.07	0.91	2.69	3.72			N/A	N/A
2 - A22 (South)	0.85	0.07	0.81	1.33	1.76			N/A	N/A
3 - A22 (West)	11.81	0.27	6.37	29.17	39.75			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.33	0.03	0.28	2.33	7.62			N/A	N/A
2 - A22 (South)	1.43	0.03	0.26	1.43	1.43			N/A	N/A
3 - A22 (West)	73.81	35.17	70.05	109.38	122.69			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.38	0.03	0.27	2.38	3.24			N/A	N/A
2 - A22 (South)	1.44	0.03	0.27	1.44	1.44			N/A	N/A
3 - A22 (West)	134.47	>199	>199	>199	>199			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.40	0.07	0.97	2.93	4.06			N/A	N/A
2 - A22 (South)	0.87	0.22	0.96	1.44	1.50			N/A	N/A
3 - A22 (West)	121.27	60.67	115.94	177.08	197.62			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.95	0.05	0.47	2.08	3.15			N/A	N/A
2 - A22 (South)	0.61	0.06	0.64	1.34	1.43			N/A	N/A
3 - A22 (West)	53.22	23.32	49.95	80.99	91.63			N/A	N/A

2039 with All Developments, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	80.46	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	793	100.000
2 - A22 (South)		ONE HOUR	✓	941	100.000
3 - A22 (West)		ONE HOUR	✓	1280	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	361	432
	2 - A22 (South)	227	0	714
	3 - A22 (West)	324	956	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.89	30.95	7.0	38.7	D	728	1092
2 - A22 (South)	0.63	5.90	1.7	2.5	A	863	1295
3 - A22 (West)	1.09	165.96	71.8	136.0	F	1175	1762

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	597	149	712	1111	0.537	592	412	0.0	1.1	6.884	A
2 - A22 (South)	708	177	323	1739	0.407	706	982	0.0	0.7	3.476	A
3 - A22 (West)	964	241	170	1331	0.724	954	858	0.0	2.5	9.317	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	713	178	849	1039	0.686	709	491	1.1	2.1	10.795	B
2 - A22 (South)	846	211	386	1700	0.498	845	1172	0.7	1.0	4.205	A
3 - A22 (West)	1151	288	204	1313	0.876	1136	1027	2.5	6.1	19.000	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	873	218	949	986	0.886	857	571	2.1	6.2	25.197	D
2 - A22 (South)	1036	259	467	1650	0.628	1033	1339	1.0	1.7	5.814	A
3 - A22 (West)	1409	352	249	1289	1.093	1270	1251	6.1	40.8	77.857	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	873	218	960	980	0.891	870	575	6.2	7.0	30.949	D
2 - A22 (South)	1036	259	474	1645	0.630	1036	1356	1.7	1.7	5.905	A
3 - A22 (West)	1409	352	250	1289	1.093	1285	1260	40.8	71.8	165.955	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	713	178	967	976	0.730	730	532	7.0	2.9	15.481	C
2 - A22 (South)	846	211	397	1693	0.500	849	1299	1.7	1.0	4.280	A
3 - A22 (West)	1151	288	205	1312	0.877	1294	1041	71.8	35.9	152.226	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	597	149	819	1055	0.566	603	449	2.9	1.3	8.078	A
2 - A22 (South)	708	177	329	1735	0.408	710	1093	1.0	0.7	3.516	A
3 - A22 (West)	964	241	171	1330	0.725	1096	867	35.9	2.8	24.840	C

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.14	0.55	1.02	1.14	1.51			N/A	N/A
2 - A22 (South)	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	2.53	0.22	1.50	4.89	6.29			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.11	0.06	0.79	5.51	8.37			N/A	N/A
2 - A22 (South)	0.98	0.07	0.80	1.81	2.46			N/A	N/A
3 - A22 (West)	6.08	0.10	2.04	16.21	23.53			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	6.22	0.05	0.47	17.69	32.09			N/A	N/A
2 - A22 (South)	1.66	0.03	0.26	1.66	1.66			N/A	N/A
3 - A22 (West)	40.79	11.28	36.16	70.86	83.56			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	7.04	0.04	0.36	15.80	38.67			N/A	N/A
2 - A22 (South)	1.68	0.03	0.26	1.68	1.68			N/A	N/A
3 - A22 (West)	71.80	25.35	65.86	117.65	136.03			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.85	0.05	0.66	7.88	12.62			N/A	N/A
2 - A22 (South)	1.01	0.17	1.01	1.40	1.74			N/A	N/A
3 - A22 (West)	35.86	11.17	32.22	60.24	70.32			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.33	0.03	0.32	2.73	6.85			N/A	N/A
2 - A22 (South)	0.69	0.06	0.67	1.23	1.23			N/A	N/A
3 - A22 (West)	2.78	0.03	0.30	2.78	12.11			N/A	N/A

2039 with All Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	173.86	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	715	100.000
2 - A22 (South)		ONE HOUR	✓	828	100.000
3 - A22 (West)		ONE HOUR	✓	1473	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	151	564
	2 - A22 (South)	81	0	747
	3 - A22 (West)	722	751	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.70	10.88	2.3	7.2	B	656	984
2 - A22 (South)	0.59	5.60	1.4	1.7	A	760	1140
3 - A22 (West)	1.18	347.56	138.3	200.0	F	1352	2027

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	538	135	558	1193	0.451	535	597	0.0	0.8	5.450	A
2 - A22 (South)	623	156	422	1677	0.372	621	671	0.0	0.6	3.401	A
3 - A22 (West)	1109	277	61	1388	0.799	1094	982	0.0	3.7	11.722	B

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	643	161	658	1140	0.564	641	705	0.8	1.3	7.192	A
2 - A22 (South)	744	186	506	1626	0.458	743	793	0.6	0.8	4.076	A
3 - A22 (West)	1324	331	73	1382	0.958	1290	1176	3.7	12.3	31.191	D

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	787	197	697	1119	0.704	783	759	1.3	2.3	10.594	B
2 - A22 (South)	912	228	618	1556	0.586	909	862	0.8	1.4	5.546	A
3 - A22 (West)	1622	405	89	1373	1.181	1367	1438	12.3	76.0	125.790	F

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	787	197	700	1117	0.704	787	762	2.3	2.3	10.876	B
2 - A22 (South)	912	228	621	1554	0.586	912	866	1.4	1.4	5.599	A
3 - A22 (West)	1622	405	89	1373	1.181	1372	1443	76.0	138.3	287.045	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	643	161	699	1118	0.575	647	745	2.3	1.4	7.704	A
2 - A22 (South)	744	186	510	1623	0.459	747	836	1.4	0.9	4.119	A
3 - A22 (West)	1324	331	73	1381	0.959	1372	1184	138.3	126.5	347.563	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	538	135	702	1116	0.482	540	736	1.4	0.9	6.268	A
2 - A22 (South)	623	156	426	1675	0.372	624	816	0.9	0.6	3.429	A
3 - A22 (West)	1109	277	61	1388	0.799	1377	989	126.5	59.5	245.142	F

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.81	0.55	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	3.72	0.07	1.32	10.05	15.12			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.27	0.07	0.91	2.65	3.65			N/A	N/A
2 - A22 (South)	0.84	0.08	0.81	1.24	1.70			N/A	N/A
3 - A22 (West)	12.32	0.28	6.71	30.37	41.32			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.29	0.03	0.28	2.29	7.23			N/A	N/A
2 - A22 (South)	1.39	0.03	0.26	1.39	1.39			N/A	N/A
3 - A22 (West)	75.96	36.67	72.20	112.01	125.44			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	2.33	0.03	0.27	2.33	3.04			N/A	N/A
2 - A22 (South)	1.41	0.03	0.27	1.41	1.41			N/A	N/A
3 - A22 (West)	138.35	>199	>199	>199	>199			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	1.38	0.07	0.97	2.87	3.95			N/A	N/A
2 - A22 (South)	0.85	0.23	0.96	1.42	1.48			N/A	N/A
3 - A22 (West)	126.51	>199	>199	>199	>199			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.94	0.05	0.48	2.02	3.05			N/A	N/A
2 - A22 (South)	0.60	0.06	0.64	1.34	1.43			N/A	N/A
3 - A22 (West)	59.54	26.65	56.06	90.05	101.67			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: M03a-Batts Bridge Roundabout Jacobs 22-02-18.j9
Path: C:\Users\JoeEarp\OneDrive - Motion\TP Projects\gluckf 2001061\Analysis\Junction Modelling
Report generation date: 18/02/2022 10:34:44

»2018 Baseline, AM
»2018 Baseline, PM
»2039 Baseline, AM
»2039 Baseline, PM
»2039 with Downlands Farm, AM
»2039 with Downlands Farm, PM
»2039 with All Developments, AM
»2039 with All Developments, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	2018 Baseline					
1 - Batts Bridge Road	0.1	3.33	0.05	0.0	3.56	0.03
2 - A22 (East)	2.9	7.61	0.74	0.7	3.46	0.42
3 - A272	0.5	3.81	0.36	1.0	4.30	0.50
4 - A22 (West)	0.6	3.34	0.37	1.2	4.91	0.54
	2039 Baseline					
1 - Batts Bridge Road	0.1	3.81	0.09	0.1	3.71	0.05
2 - A22 (East)	3.4	8.86	0.78	1.3	4.80	0.57
3 - A272	0.8	4.57	0.43	1.1	4.79	0.52
4 - A22 (West)	0.8	3.94	0.46	1.7	5.94	0.63
	2039 with Downlands Farm					
1 - Batts Bridge Road	0.1	3.77	0.08	0.1	3.72	0.05
2 - A22 (East)	3.6	9.24	0.79	1.3	4.77	0.57
3 - A272	0.7	4.49	0.42	1.1	4.81	0.52
4 - A22 (West)	0.9	3.96	0.47	1.6	5.89	0.62
	2039 with All Developments					
1 - Batts Bridge Road	0.1	3.81	0.09	0.1	3.70	0.05
2 - A22 (East)	3.9	9.80	0.80	1.3	4.71	0.57
3 - A272	0.7	4.55	0.42	1.1	4.77	0.52
4 - A22 (West)	0.9	3.98	0.47	1.6	5.82	0.62

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Budletts Roundabout
Location	Uckfield, East Sussex
Site number	
Date	26/10/2021
Version	
Status	(new file)
Identifier	
Client	Gleeson Strategic Lane
Jobnumber	gluckf/2001061
Enumerator	MOTION\JoeEarp
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Batts Bridge Road	
2	A22 (East)	
3	A272	
4	A22 (West)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Batts Bridge Road	3.00	7.57	18.9	55.0	56.0	36.0	
2 - A22 (East)	5.00	8.00	8.3	33.0	56.0	35.0	
3 - A272	3.67	7.70	16.9	66.0	56.0	22.0	
4 - A22 (West)	5.13	8.08	5.2	63.0	56.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Batts Bridge Road	0.583	1706
2 - A22 (East)	0.623	1940
3 - A272	0.635	1916
4 - A22 (West)	0.635	1947

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Batts Bridge Road		ONE HOUR	✓	50	100.000
2 - A22 (East)		ONE HOUR	✓	1248	100.000
3 - A272		ONE HOUR	✓	473	100.000
4 - A22 (West)		ONE HOUR	✓	577	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	50	0
	2 - A22 (East)	0	0	604	644
	3 - A272	24	312	0	137
	4 - A22 (West)	0	490	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	0	0
	2 - A22 (East)	0	0	0	0
	3 - A272	0	0	0	0
	4 - A22 (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Batts Bridge Road	0.05	3.33	0.1	0.5	A	46	69
2 - A22 (East)	0.74	7.61	2.9	6.7	A	1145	1718
3 - A272	0.36	3.81	0.5	2.6	A	434	651
4 - A22 (West)	0.37	3.34	0.6	2.7	A	529	794

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	38	9	667	1317	0.029	38	18	0.0	0.0	2.812	A
2 - A22 (East)	940	235	103	1876	0.501	936	602	0.0	1.0	3.811	A
3 - A272	356	89	483	1610	0.221	355	556	0.0	0.3	2.866	A
4 - A22 (West)	434	109	252	1787	0.243	433	586	0.0	0.3	2.656	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	45	11	799	1241	0.036	45	22	0.0	0.0	3.009	A
2 - A22 (East)	1122	280	123	1864	0.602	1120	720	1.0	1.5	4.829	A
3 - A272	425	106	578	1549	0.274	425	665	0.3	0.4	3.201	A
4 - A22 (West)	519	130	302	1756	0.295	518	701	0.3	0.4	2.909	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	55	14	978	1136	0.048	55	26	0.0	0.1	3.328	A
2 - A22 (East)	1374	344	151	1846	0.744	1369	882	1.5	2.8	7.454	A
3 - A272	521	130	706	1468	0.355	520	813	0.4	0.5	3.797	A
4 - A22 (West)	635	159	369	1713	0.371	635	857	0.4	0.6	3.337	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	55	14	979	1136	0.048	55	26	0.1	0.1	3.330	A
2 - A22 (East)	1374	344	151	1846	0.744	1374	883	2.8	2.9	7.614	A
3 - A272	521	130	709	1466	0.355	521	816	0.5	0.5	3.807	A
4 - A22 (West)	635	159	370	1713	0.371	635	860	0.6	0.6	3.340	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	45	11	800	1240	0.036	45	22	0.1	0.0	3.014	A
2 - A22 (East)	1122	280	123	1863	0.602	1127	722	2.9	1.5	4.926	A
3 - A272	425	106	582	1547	0.275	426	669	0.5	0.4	3.212	A
4 - A22 (West)	519	130	303	1755	0.296	519	705	0.6	0.4	2.913	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	38	9	670	1316	0.029	38	18	0.0	0.0	2.818	A
2 - A22 (East)	940	235	103	1876	0.501	942	604	1.5	1.0	3.863	A
3 - A272	356	89	486	1608	0.221	356	559	0.4	0.3	2.879	A
4 - A22 (West)	434	109	253	1787	0.243	435	589	0.4	0.3	2.665	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	0.99	0.55	1.00	1.40	1.45			N/A	N/A
3 - A272	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4 - A22 (West)	0.32	0.00	0.00	0.32	0.32			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.04	0.03	0.25	0.45	0.48			N/A	N/A
2 - A22 (East)	1.49	0.05	0.50	3.77	5.81			N/A	N/A
3 - A272	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - A22 (West)	0.42	0.00	0.00	0.42	0.42			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.05	0.03	0.26	0.46	0.48			N/A	N/A
2 - A22 (East)	2.82	0.03	0.28	2.82	6.68			N/A	N/A
3 - A272	0.55	0.03	0.25	0.55	0.55			N/A	N/A
4 - A22 (West)	0.59	0.03	0.25	0.59	0.59			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.05	0.00	0.00	0.05	0.05			N/A	N/A
2 - A22 (East)	2.86	0.03	0.27	2.86	2.86			N/A	N/A
3 - A272	0.55	0.03	0.30	1.40	2.57			N/A	N/A
4 - A22 (West)	0.59	0.03	0.29	1.27	2.71			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.04	0.00	0.00	0.04	0.04			N/A	N/A
2 - A22 (East)	1.53	0.08	1.06	3.27	4.53			N/A	N/A
3 - A272	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - A22 (West)	0.42	0.00	0.00	0.42	0.42			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	1.01	0.05	0.46	2.35	3.59			N/A	N/A
3 - A272	0.29	0.00	0.00	0.29	0.29			N/A	N/A
4 - A22 (West)	0.32	0.00	0.00	0.32	0.32			N/A	N/A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Batts Bridge Road		ONE HOUR	✓	28	100.000
2 - A22 (East)		ONE HOUR	✓	696	100.000
3 - A272		ONE HOUR	✓	749	100.000
4 - A22 (West)		ONE HOUR	✓	785	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	28	0
	2 - A22 (East)	0	0	333	363
	3 - A272	252	249	0	248
	4 - A22 (West)	0	617	168	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	0	0
	2 - A22 (East)	0	0	0	0
	3 - A272	0	0	0	0
	4 - A22 (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Batts Bridge Road	0.03	3.56	0.0	0.5	A	26	39
2 - A22 (East)	0.42	3.46	0.7	2.4	A	639	958
3 - A272	0.50	4.30	1.0	1.5	A	687	1031
4 - A22 (West)	0.54	4.91	1.2	1.5	A	720	1080

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	21	5	776	1254	0.017	21	189	0.0	0.0	2.919	A
2 - A22 (East)	524	131	147	1849	0.283	522	650	0.0	0.4	2.710	A
3 - A272	564	141	272	1743	0.323	562	397	0.0	0.5	3.042	A
4 - A22 (West)	591	148	376	1709	0.346	589	459	0.0	0.5	3.209	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	25	6	928	1165	0.022	25	226	0.0	0.0	3.157	A
2 - A22 (East)	626	156	176	1831	0.342	625	778	0.4	0.5	2.984	A
3 - A272	673	168	326	1709	0.394	673	475	0.5	0.6	3.471	A
4 - A22 (West)	706	176	450	1662	0.425	705	549	0.5	0.7	3.758	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	31	8	1136	1044	0.030	31	277	0.0	0.0	3.552	A
2 - A22 (East)	766	192	215	1806	0.424	765	952	0.5	0.7	3.456	A
3 - A272	825	206	399	1663	0.496	823	582	0.6	1.0	4.281	A
4 - A22 (West)	864	216	551	1598	0.541	863	672	0.7	1.2	4.884	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	31	8	1138	1043	0.030	31	277	0.0	0.0	3.557	A
2 - A22 (East)	766	192	216	1806	0.424	766	953	0.7	0.7	3.462	A
3 - A272	825	206	400	1662	0.496	825	582	1.0	1.0	4.296	A
4 - A22 (West)	864	216	552	1597	0.541	864	673	1.2	1.2	4.910	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	25	6	932	1163	0.022	25	227	0.0	0.0	3.165	A
2 - A22 (East)	626	156	177	1830	0.342	627	780	0.7	0.5	2.992	A
3 - A272	673	168	327	1709	0.394	675	476	1.0	0.7	3.484	A
4 - A22 (West)	706	176	451	1661	0.425	707	550	1.2	0.7	3.784	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	21	5	780	1252	0.017	21	190	0.0	0.0	2.926	A
2 - A22 (East)	524	131	148	1848	0.284	524	653	0.5	0.4	2.722	A
3 - A272	564	141	274	1743	0.324	565	399	0.7	0.5	3.057	A
4 - A22 (West)	591	148	378	1708	0.346	592	460	0.7	0.5	3.230	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.02	0.00	0.00	0.02	0.02			N/A	N/A
2 - A22 (East)	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3 - A272	0.48	0.00	0.00	0.48	0.48			N/A	N/A
4 - A22 (West)	0.53	0.53	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.02	0.02	0.25	0.45	0.48			N/A	N/A
2 - A22 (East)	0.52	0.52	1.00	1.40	1.45			N/A	N/A
3 - A272	0.65	0.09	0.81	1.36	1.43			N/A	N/A
4 - A22 (West)	0.73	0.08	0.81	1.41	1.48			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	0.73	0.03	0.25	0.73	0.73			N/A	N/A
3 - A272	0.97	0.03	0.26	0.97	0.97			N/A	N/A
4 - A22 (West)	1.16	0.03	0.26	1.16	1.16			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	0.73	0.03	0.28	0.73	2.41			N/A	N/A
3 - A272	0.98	0.03	0.27	0.98	1.34			N/A	N/A
4 - A22 (West)	1.17	0.03	0.27	1.17	1.40			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.02	0.00	0.00	0.02	0.02			N/A	N/A
2 - A22 (East)	0.52	0.52	1.00	1.40	1.45			N/A	N/A
3 - A272	0.65	0.55	1.00	1.40	1.45			N/A	N/A
4 - A22 (West)	0.74	0.40	0.97	1.39	1.45			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.02	0.00	0.00	0.02	0.02			N/A	N/A
2 - A22 (East)	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - A272	0.48	0.00	0.00	0.48	0.48			N/A	N/A
4 - A22 (West)	0.53	0.05	0.58	1.32	1.41			N/A	N/A

2039 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Batts Bridge Road		ONE HOUR	✓	84	100.000
2 - A22 (East)		ONE HOUR	✓	1279	100.000
3 - A272		ONE HOUR	✓	549	100.000
4 - A22 (West)		ONE HOUR	✓	705	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	84	0
	2 - A22 (East)	0	0	528	751
	3 - A272	32	337	0	180
	4 - A22 (West)	0	604	101	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	0	0
	2 - A22 (East)	0	0	0	0
	3 - A272	0	0	0	0
	4 - A22 (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Batts Bridge Road	0.09	3.81	0.1	0.5	A	77	116
2 - A22 (East)	0.78	8.86	3.4	11.6	A	1174	1760
3 - A272	0.43	4.57	0.8	2.8	A	504	756
4 - A22 (West)	0.46	3.94	0.8	1.9	A	647	970

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	63	16	782	1250	0.051	63	24	0.0	0.1	3.031	A
2 - A22 (East)	963	241	139	1854	0.519	959	706	0.0	1.1	4.002	A
3 - A272	413	103	563	1559	0.265	412	535	0.0	0.4	3.134	A
4 - A22 (West)	531	133	277	1772	0.300	529	698	0.0	0.4	2.893	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	76	19	936	1161	0.065	75	29	0.1	0.1	3.316	A
2 - A22 (East)	1150	287	166	1837	0.626	1147	845	1.1	1.6	5.205	A
3 - A272	494	123	674	1488	0.332	493	640	0.4	0.5	3.614	A
4 - A22 (West)	634	158	331	1737	0.365	633	835	0.4	0.6	3.259	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	92	23	1146	1038	0.089	92	35	0.1	0.1	3.804	A
2 - A22 (East)	1408	352	203	1814	0.777	1401	1034	1.6	3.3	8.597	A
3 - A272	604	151	823	1394	0.434	603	782	0.5	0.8	4.549	A
4 - A22 (West)	776	194	406	1690	0.459	775	1021	0.6	0.8	3.930	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	92	23	1147	1037	0.089	92	35	0.1	0.1	3.808	A
2 - A22 (East)	1408	352	204	1813	0.777	1408	1036	3.3	3.4	8.863	A
3 - A272	604	151	827	1391	0.434	604	785	0.8	0.8	4.574	A
4 - A22 (West)	776	194	406	1690	0.459	776	1025	0.8	0.8	3.941	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	76	19	938	1159	0.065	76	29	0.1	0.1	3.324	A
2 - A22 (East)	1150	287	167	1836	0.626	1157	848	3.4	1.7	5.348	A
3 - A272	494	123	679	1485	0.332	495	644	0.8	0.5	3.640	A
4 - A22 (West)	634	158	332	1736	0.365	635	841	0.8	0.6	3.270	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	63	16	785	1248	0.051	63	24	0.1	0.1	3.039	A
2 - A22 (East)	963	241	139	1853	0.520	965	709	1.7	1.1	4.066	A
3 - A272	413	103	567	1556	0.266	414	538	0.5	0.4	3.154	A
4 - A22 (West)	531	133	278	1771	0.300	531	703	0.6	0.4	2.905	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.05	0.00	0.00	0.05	0.05			N/A	N/A
2 - A22 (East)	1.07	0.55	1.00	1.40	1.45			N/A	N/A
3 - A272	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - A22 (West)	0.43	0.00	0.00	0.43	0.43			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.07	0.03	0.25	0.45	0.48			N/A	N/A
2 - A22 (East)	1.65	0.05	0.48	4.30	6.80			N/A	N/A
3 - A272	0.49	0.00	0.00	0.49	0.49			N/A	N/A
4 - A22 (West)	0.57	0.08	0.77	1.35	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.10	0.03	0.26	0.47	0.49			N/A	N/A
2 - A22 (East)	3.34	0.03	0.29	3.34	11.57			N/A	N/A
3 - A272	0.76	0.03	0.25	0.76	0.76			N/A	N/A
4 - A22 (West)	0.84	0.03	0.25	0.84	0.84			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - A22 (East)	3.40	0.03	0.27	3.40	3.40			N/A	N/A
3 - A272	0.76	0.03	0.28	0.76	2.79			N/A	N/A
4 - A22 (West)	0.85	0.03	0.27	0.85	1.95			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - A22 (East)	1.70	0.06	0.94	3.99	5.80			N/A	N/A
3 - A272	0.50	0.50	1.00	1.40	1.45			N/A	N/A
4 - A22 (West)	0.58	0.55	1.00	1.40	1.45			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.05	0.00	0.00	0.05	0.05			N/A	N/A
2 - A22 (East)	1.09	0.04	0.41	2.72	4.46			N/A	N/A
3 - A272	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - A22 (West)	0.43	0.00	0.00	0.43	0.43			N/A	N/A

2039 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Batts Bridge Road		ONE HOUR	✓	49	100.000
2 - A22 (East)		ONE HOUR	✓	912	100.000
3 - A272		ONE HOUR	✓	746	100.000
4 - A22 (West)		ONE HOUR	✓	924	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	49	0
	2 - A22 (East)	0	0	421	491
	3 - A272	324	140	0	282
	4 - A22 (West)	0	702	222	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	0	0
	2 - A22 (East)	0	0	0	0
	3 - A272	0	0	0	0
	4 - A22 (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Batts Bridge Road	0.05	3.71	0.1	0.5	A	45	67
2 - A22 (East)	0.57	4.80	1.3	1.7	A	837	1255
3 - A272	0.52	4.79	1.1	1.4	A	685	1027
4 - A22 (West)	0.63	5.94	1.7	2.4	A	848	1272

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	37	9	798	1241	0.030	37	243	0.0	0.0	2.988	A
2 - A22 (East)	687	172	203	1814	0.379	684	631	0.0	0.6	3.181	A
3 - A272	562	140	368	1682	0.334	560	519	0.0	0.5	3.201	A
4 - A22 (West)	696	174	348	1726	0.403	693	580	0.0	0.7	3.475	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	44	11	955	1149	0.038	44	291	0.0	0.0	3.255	A
2 - A22 (East)	820	205	243	1789	0.458	819	756	0.6	0.8	3.709	A
3 - A272	671	168	441	1636	0.410	670	621	0.5	0.7	3.721	A
4 - A22 (West)	831	208	417	1683	0.494	829	694	0.7	1.0	4.212	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	54	13	1168	1025	0.053	54	356	0.0	0.1	3.705	A
2 - A22 (East)	1004	251	298	1755	0.572	1002	925	0.8	1.3	4.770	A
3 - A272	821	205	540	1574	0.522	820	760	0.7	1.1	4.766	A
4 - A22 (West)	1017	254	510	1624	0.627	1015	849	1.0	1.6	5.882	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	54	13	1171	1023	0.053	54	357	0.1	0.1	3.712	A
2 - A22 (East)	1004	251	298	1754	0.572	1004	927	1.3	1.3	4.798	A
3 - A272	821	205	541	1573	0.522	821	762	1.1	1.1	4.789	A
4 - A22 (West)	1017	254	511	1623	0.627	1017	851	1.6	1.7	5.941	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	44	11	960	1147	0.038	44	292	0.1	0.0	3.266	A
2 - A22 (East)	820	205	244	1788	0.459	822	759	1.3	0.9	3.732	A
3 - A272	671	168	442	1635	0.410	672	624	1.1	0.7	3.742	A
4 - A22 (West)	831	208	418	1682	0.494	833	697	1.7	1.0	4.255	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	37	9	802	1239	0.030	37	244	0.0	0.0	2.995	A
2 - A22 (East)	687	172	204	1813	0.379	688	635	0.9	0.6	3.203	A
3 - A272	562	140	370	1681	0.334	562	522	0.7	0.5	3.219	A
4 - A22 (West)	696	174	350	1725	0.403	697	583	1.0	0.7	3.506	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	0.61	0.55	1.00	1.40	1.45			N/A	N/A
3 - A272	0.50	0.00	0.00	0.50	0.50			N/A	N/A
4 - A22 (West)	0.67	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.04	0.03	0.25	0.45	0.48			N/A	N/A
2 - A22 (East)	0.84	0.08	0.82	1.23	1.69			N/A	N/A
3 - A272	0.69	0.09	0.81	1.38	1.45			N/A	N/A
4 - A22 (West)	0.97	0.07	0.80	1.76	2.37			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.06	0.03	0.26	0.46	0.49			N/A	N/A
2 - A22 (East)	1.32	0.03	0.26	1.32	1.32			N/A	N/A
3 - A272	1.08	0.03	0.26	1.08	1.08			N/A	N/A
4 - A22 (West)	1.65	0.03	0.26	1.65	1.65			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - A22 (East)	1.33	0.03	0.26	1.33	1.33			N/A	N/A
3 - A272	1.09	0.03	0.27	1.09	1.13			N/A	N/A
4 - A22 (West)	1.66	0.03	0.26	1.66	1.66			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.04	0.00	0.00	0.04	0.04			N/A	N/A
2 - A22 (East)	0.85	0.40	0.97	1.41	1.46			N/A	N/A
3 - A272	0.70	0.45	0.97	1.39	1.45			N/A	N/A
4 - A22 (West)	0.98	0.16	1.00	1.33	1.70			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	0.61	0.07	0.73	1.35	1.43			N/A	N/A
3 - A272	0.50	0.05	0.48	1.29	1.40			N/A	N/A
4 - A22 (West)	0.68	0.06	0.66	1.15	1.15			N/A	N/A

2039 with Downlands Farm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Batts Bridge Road		ONE HOUR	✓	78	100.000
2 - A22 (East)		ONE HOUR	✓	1299	100.000
3 - A272		ONE HOUR	✓	529	100.000
4 - A22 (West)		ONE HOUR	✓	725	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	78	0
	2 - A22 (East)	0	0	537	762
	3 - A272	32	312	0	185
	4 - A22 (West)	0	626	99	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	0	0
	2 - A22 (East)	0	0	0	0
	3 - A272	0	0	0	0
	4 - A22 (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Batts Bridge Road	0.08	3.77	0.1	0.5	A	72	107
2 - A22 (East)	0.79	9.24	3.6	13.2	A	1192	1788
3 - A272	0.42	4.49	0.7	2.9	A	485	728
4 - A22 (West)	0.47	3.96	0.9	1.8	A	665	998

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	59	15	778	1253	0.047	59	24	0.0	0.0	3.014	A
2 - A22 (East)	978	244	133	1857	0.527	974	704	0.0	1.1	4.052	A
3 - A272	398	100	571	1554	0.256	397	535	0.0	0.3	3.107	A
4 - A22 (West)	546	136	258	1784	0.306	544	710	0.0	0.4	2.901	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	70	18	931	1163	0.060	70	29	0.0	0.1	3.292	A
2 - A22 (East)	1168	292	159	1841	0.634	1165	842	1.1	1.7	5.307	A
3 - A272	476	119	684	1482	0.321	475	641	0.3	0.5	3.572	A
4 - A22 (West)	652	163	309	1751	0.372	651	850	0.4	0.6	3.270	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	86	21	1140	1042	0.082	86	35	0.1	0.1	3.765	A
2 - A22 (East)	1430	358	195	1819	0.786	1423	1031	1.7	3.5	8.928	A
3 - A272	582	146	835	1386	0.420	581	783	0.5	0.7	4.467	A
4 - A22 (West)	798	200	378	1707	0.468	797	1038	0.6	0.9	3.950	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	86	21	1142	1041	0.083	86	35	0.1	0.1	3.769	A
2 - A22 (East)	1430	358	195	1819	0.786	1430	1033	3.5	3.6	9.236	A
3 - A272	582	146	839	1384	0.421	582	786	0.7	0.7	4.492	A
4 - A22 (West)	798	200	379	1707	0.468	798	1042	0.9	0.9	3.961	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	70	18	934	1162	0.060	70	29	0.1	0.1	3.297	A
2 - A22 (East)	1168	292	159	1841	0.634	1175	845	3.6	1.8	5.464	A
3 - A272	476	119	689	1479	0.322	477	645	0.7	0.5	3.595	A
4 - A22 (West)	652	163	310	1751	0.372	653	856	0.9	0.6	3.284	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	59	15	782	1251	0.047	59	24	0.1	0.0	3.019	A
2 - A22 (East)	978	244	133	1857	0.527	981	707	1.8	1.1	4.120	A
3 - A272	398	100	575	1551	0.257	399	539	0.5	0.3	3.127	A
4 - A22 (West)	546	136	259	1783	0.306	546	715	0.6	0.4	2.914	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.05	0.00	0.00	0.05	0.05			N/A	N/A
2 - A22 (East)	1.10	0.55	1.00	1.40	1.45			N/A	N/A
3 - A272	0.34	0.00	0.00	0.34	0.34			N/A	N/A
4 - A22 (West)	0.44	0.00	0.00	0.44	0.44			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.06	0.03	0.25	0.45	0.48			N/A	N/A
2 - A22 (East)	1.71	0.05	0.47	4.49	7.13			N/A	N/A
3 - A272	0.47	0.00	0.00	0.47	0.47			N/A	N/A
4 - A22 (West)	0.59	0.08	0.79	1.36	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.09	0.03	0.26	0.47	0.49			N/A	N/A
2 - A22 (East)	3.52	0.03	0.29	3.52	13.22			N/A	N/A
3 - A272	0.72	0.03	0.25	0.72	0.72			N/A	N/A
4 - A22 (West)	0.87	0.03	0.25	0.87	0.87			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.09	0.00	0.00	0.09	0.09			N/A	N/A
2 - A22 (East)	3.60	0.03	0.27	3.60	3.94			N/A	N/A
3 - A272	0.72	0.03	0.28	0.93	2.87			N/A	N/A
4 - A22 (West)	0.87	0.03	0.27	0.87	1.79			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - A22 (East)	1.76	0.06	0.90	4.28	6.24			N/A	N/A
3 - A272	0.48	0.00	0.00	0.48	0.48			N/A	N/A
4 - A22 (West)	0.60	0.55	1.00	1.40	1.45			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.05	0.00	0.00	0.05	0.05			N/A	N/A
2 - A22 (East)	1.12	0.04	0.40	2.83	4.75			N/A	N/A
3 - A272	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4 - A22 (West)	0.44	0.00	0.00	0.44	0.44			N/A	N/A

2039 with Downlands Farm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Batts Bridge Road		ONE HOUR	✓	49	100.000
2 - A22 (East)		ONE HOUR	✓	908	100.000
3 - A272		ONE HOUR	✓	750	100.000
4 - A22 (West)		ONE HOUR	✓	915	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	49	0
	2 - A22 (East)	0	0	419	489
	3 - A272	319	152	0	279
	4 - A22 (West)	0	693	222	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	0	0
	2 - A22 (East)	0	0	0	0
	3 - A272	0	0	0	0
	4 - A22 (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Batts Bridge Road	0.05	3.72	0.1	0.5	A	45	67
2 - A22 (East)	0.57	4.77	1.3	1.7	A	833	1250
3 - A272	0.52	4.81	1.1	1.5	A	688	1032
4 - A22 (West)	0.62	5.89	1.6	2.3	A	840	1259

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	37	9	800	1240	0.030	37	239	0.0	0.0	2.992	A
2 - A22 (East)	684	171	203	1814	0.377	681	634	0.0	0.6	3.172	A
3 - A272	565	141	367	1683	0.335	563	518	0.0	0.5	3.207	A
4 - A22 (West)	689	172	353	1723	0.400	686	576	0.0	0.7	3.463	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	44	11	958	1148	0.038	44	286	0.0	0.0	3.260	A
2 - A22 (East)	816	204	243	1789	0.456	815	759	0.6	0.8	3.695	A
3 - A272	674	169	439	1637	0.412	673	620	0.5	0.7	3.730	A
4 - A22 (West)	823	206	423	1679	0.490	821	690	0.7	1.0	4.193	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	54	13	1172	1023	0.053	54	351	0.0	0.1	3.713	A
2 - A22 (East)	1000	250	298	1755	0.570	998	928	0.8	1.3	4.744	A
3 - A272	826	206	537	1575	0.524	824	758	0.7	1.1	4.785	A
4 - A22 (West)	1007	252	518	1619	0.622	1005	844	1.0	1.6	5.836	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	54	13	1175	1021	0.053	54	351	0.1	0.1	3.719	A
2 - A22 (East)	1000	250	298	1754	0.570	1000	930	1.3	1.3	4.770	A
3 - A272	826	206	538	1574	0.524	826	760	1.1	1.1	4.808	A
4 - A22 (West)	1007	252	519	1618	0.623	1007	846	1.6	1.6	5.892	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	44	11	962	1145	0.038	44	287	0.1	0.0	3.268	A
2 - A22 (East)	816	204	244	1788	0.457	818	762	1.3	0.8	3.718	A
3 - A272	674	169	441	1636	0.412	676	622	1.1	0.7	3.752	A
4 - A22 (West)	823	206	424	1678	0.490	825	692	1.6	1.0	4.234	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	37	9	805	1237	0.030	37	240	0.0	0.0	3.001	A
2 - A22 (East)	684	171	204	1813	0.377	685	637	0.8	0.6	3.194	A
3 - A272	565	141	369	1682	0.336	565	520	0.7	0.5	3.225	A
4 - A22 (West)	689	172	355	1722	0.400	690	579	1.0	0.7	3.494	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	0.60	0.55	1.00	1.40	1.45			N/A	N/A
3 - A272	0.50	0.50	1.00	1.40	1.45			N/A	N/A
4 - A22 (West)	0.66	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.04	0.03	0.25	0.45	0.48			N/A	N/A
2 - A22 (East)	0.83	0.08	0.82	1.18	1.66			N/A	N/A
3 - A272	0.70	0.09	0.81	1.38	1.45			N/A	N/A
4 - A22 (West)	0.95	0.07	0.80	1.72	2.26			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.06	0.03	0.26	0.46	0.49			N/A	N/A
2 - A22 (East)	1.31	0.03	0.26	1.31	1.31			N/A	N/A
3 - A272	1.09	0.03	0.26	1.09	1.09			N/A	N/A
4 - A22 (West)	1.62	0.03	0.26	1.62	1.62			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - A22 (East)	1.32	0.03	0.26	1.32	1.32			N/A	N/A
3 - A272	1.10	0.03	0.27	1.10	1.10			N/A	N/A
4 - A22 (West)	1.63	0.03	0.26	1.63	1.63			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.04	0.00	0.00	0.04	0.04			N/A	N/A
2 - A22 (East)	0.85	0.42	0.97	1.41	1.46			N/A	N/A
3 - A272	0.71	0.44	0.97	1.39	1.45			N/A	N/A
4 - A22 (West)	0.97	0.17	0.99	1.25	1.66			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	0.61	0.07	0.73	1.35	1.43			N/A	N/A
3 - A272	0.51	0.05	0.49	1.30	1.40			N/A	N/A
4 - A22 (West)	0.67	0.06	0.66	1.01	1.01			N/A	N/A

2039 with All Developments, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Batts Bridge Road		ONE HOUR	✓	86	100.000
2 - A22 (East)		ONE HOUR	✓	1316	100.000
3 - A272		ONE HOUR	✓	525	100.000
4 - A22 (West)		ONE HOUR	✓	733	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	86	0
	2 - A22 (East)	0	0	534	782
	3 - A272	32	305	0	188
	4 - A22 (West)	0	636	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	0	0
	2 - A22 (East)	0	0	0	0
	3 - A272	0	0	0	0
	4 - A22 (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Batts Bridge Road	0.09	3.81	0.1	0.5	A	79	118
2 - A22 (East)	0.80	9.80	3.9	15.5	A	1208	1811
3 - A272	0.42	4.55	0.7	2.9	A	482	723
4 - A22 (West)	0.47	3.98	0.9	1.7	A	673	1009

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	65	16	779	1252	0.052	65	24	0.0	0.1	3.030	A
2 - A22 (East)	991	248	137	1855	0.534	986	706	0.0	1.1	4.124	A
3 - A272	395	99	586	1544	0.256	394	537	0.0	0.3	3.125	A
4 - A22 (West)	552	138	253	1787	0.309	550	727	0.0	0.4	2.907	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	77	19	932	1163	0.066	77	29	0.1	0.1	3.315	A
2 - A22 (East)	1183	296	164	1838	0.644	1180	845	1.1	1.8	5.454	A
3 - A272	472	118	701	1471	0.321	471	643	0.3	0.5	3.600	A
4 - A22 (West)	659	165	303	1755	0.375	658	870	0.4	0.6	3.280	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	95	24	1141	1041	0.091	95	35	0.1	0.1	3.803	A
2 - A22 (East)	1449	362	201	1815	0.798	1441	1034	1.8	3.8	9.430	A
3 - A272	578	145	856	1373	0.421	577	786	0.5	0.7	4.519	A
4 - A22 (West)	807	202	370	1712	0.471	806	1063	0.6	0.9	3.967	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	95	24	1143	1040	0.091	95	35	0.1	0.1	3.807	A
2 - A22 (East)	1449	362	201	1815	0.798	1449	1036	3.8	3.9	9.805	A
3 - A272	578	145	861	1370	0.422	578	789	0.7	0.7	4.546	A
4 - A22 (West)	807	202	371	1712	0.471	807	1068	0.9	0.9	3.978	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	77	19	935	1161	0.067	77	29	0.1	0.1	3.323	A
2 - A22 (East)	1183	296	165	1838	0.644	1191	848	3.9	1.8	5.638	A
3 - A272	472	118	708	1467	0.322	473	648	0.7	0.5	3.624	A
4 - A22 (West)	659	165	304	1755	0.376	660	877	0.9	0.6	3.291	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	65	16	782	1250	0.052	65	24	0.1	0.1	3.036	A
2 - A22 (East)	991	248	138	1854	0.534	993	709	1.8	1.2	4.194	A
3 - A272	395	99	590	1541	0.256	396	541	0.5	0.3	3.143	A
4 - A22 (West)	552	138	254	1786	0.309	552	732	0.6	0.4	2.921	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.05	0.00	0.00	0.05	0.05			N/A	N/A
2 - A22 (East)	1.14	0.55	1.00	1.40	1.45			N/A	N/A
3 - A272	0.34	0.00	0.00	0.34	0.34			N/A	N/A
4 - A22 (West)	0.44	0.00	0.00	0.44	0.44			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.07	0.03	0.25	0.45	0.48			N/A	N/A
2 - A22 (East)	1.78	0.05	0.47	4.72	7.59			N/A	N/A
3 - A272	0.47	0.00	0.00	0.47	0.47			N/A	N/A
4 - A22 (West)	0.60	0.09	0.80	1.36	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.10	0.03	0.26	0.47	0.49			N/A	N/A
2 - A22 (East)	3.77	0.03	0.30	3.77	15.51			N/A	N/A
3 - A272	0.72	0.03	0.25	0.72	0.72			N/A	N/A
4 - A22 (West)	0.88	0.03	0.25	0.88	0.88			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - A22 (East)	3.86	0.03	0.27	3.86	5.38			N/A	N/A
3 - A272	0.73	0.03	0.28	0.93	2.88			N/A	N/A
4 - A22 (West)	0.89	0.03	0.27	0.89	1.72			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.07	0.00	0.00	0.07	0.07			N/A	N/A
2 - A22 (East)	1.84	0.06	0.83	4.60	6.82			N/A	N/A
3 - A272	0.48	0.00	0.00	0.48	0.48			N/A	N/A
4 - A22 (West)	0.60	0.55	1.00	1.40	1.45			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.05	0.00	0.00	0.05	0.05			N/A	N/A
2 - A22 (East)	1.16	0.04	0.39	2.93	5.09			N/A	N/A
3 - A272	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4 - A22 (West)	0.45	0.00	0.00	0.45	0.45			N/A	N/A

2039 with All Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Batts Bridge Road		ONE HOUR	✓	50	100.000
2 - A22 (East)		ONE HOUR	✓	901	100.000
3 - A272		ONE HOUR	✓	745	100.000
4 - A22 (West)		ONE HOUR	✓	909	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	50	0
	2 - A22 (East)	0	0	412	489
	3 - A272	322	147	0	276
	4 - A22 (West)	0	690	219	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Batts Bridge Road	2 - A22 (East)	3 - A272	4 - A22 (West)
From	1 - Batts Bridge Road	0	0	0	0
	2 - A22 (East)	0	0	0	0
	3 - A272	0	0	0	0
	4 - A22 (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Batts Bridge Road	0.05	3.70	0.1	0.5	A	46	69
2 - A22 (East)	0.57	4.71	1.3	1.6	A	827	1240
3 - A272	0.52	4.77	1.1	1.4	A	684	1025
4 - A22 (West)	0.62	5.82	1.6	2.1	A	834	1251

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	38	9	792	1245	0.030	38	242	0.0	0.0	2.982	A
2 - A22 (East)	678	170	202	1815	0.374	676	628	0.0	0.6	3.155	A
3 - A272	561	140	367	1683	0.333	559	511	0.0	0.5	3.196	A
4 - A22 (West)	684	171	352	1724	0.397	682	574	0.0	0.7	3.445	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	45	11	948	1154	0.039	45	289	0.0	0.0	3.246	A
2 - A22 (East)	810	202	242	1790	0.453	809	751	0.6	0.8	3.667	A
3 - A272	670	167	439	1637	0.409	669	611	0.5	0.7	3.713	A
4 - A22 (West)	817	204	421	1680	0.486	816	687	0.7	0.9	4.161	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	55	14	1160	1030	0.053	55	354	0.0	0.1	3.690	A
2 - A22 (East)	992	248	295	1756	0.565	990	919	0.8	1.3	4.688	A
3 - A272	820	205	537	1575	0.521	819	748	0.7	1.1	4.750	A
4 - A22 (West)	1001	250	515	1620	0.618	998	841	0.9	1.6	5.763	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	55	14	1163	1029	0.054	55	355	0.1	0.1	3.697	A
2 - A22 (East)	992	248	296	1756	0.565	992	922	1.3	1.3	4.713	A
3 - A272	820	205	538	1574	0.521	820	750	1.1	1.1	4.773	A
4 - A22 (West)	1001	250	516	1620	0.618	1001	842	1.6	1.6	5.816	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	45	11	952	1151	0.039	45	290	0.1	0.0	3.253	A
2 - A22 (East)	810	202	243	1789	0.453	812	755	1.3	0.8	3.692	A
3 - A272	670	167	441	1636	0.409	671	614	1.1	0.7	3.734	A
4 - A22 (West)	817	204	423	1679	0.487	820	689	1.6	1.0	4.201	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Batts Bridge Road	38	9	796	1242	0.030	38	243	0.0	0.0	2.988	A
2 - A22 (East)	678	170	203	1814	0.374	679	631	0.8	0.6	3.177	A
3 - A272	561	140	369	1682	0.333	562	513	0.7	0.5	3.216	A
4 - A22 (West)	684	171	354	1723	0.397	686	577	1.0	0.7	3.475	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A272	0.50	0.00	0.00	0.50	0.50			N/A	N/A
4 - A22 (West)	0.65	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.04	0.03	0.25	0.45	0.48			N/A	N/A
2 - A22 (East)	0.82	0.08	0.82	1.09	1.60			N/A	N/A
3 - A272	0.69	0.09	0.81	1.38	1.45			N/A	N/A
4 - A22 (West)	0.94	0.07	0.80	1.68	2.13			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.06	0.03	0.26	0.46	0.49			N/A	N/A
2 - A22 (East)	1.28	0.03	0.26	1.28	1.28			N/A	N/A
3 - A272	1.08	0.03	0.26	1.08	1.08			N/A	N/A
4 - A22 (West)	1.59	0.03	0.26	1.59	1.59			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - A22 (East)	1.29	0.03	0.26	1.29	1.29			N/A	N/A
3 - A272	1.08	0.03	0.27	1.08	1.15			N/A	N/A
4 - A22 (West)	1.60	0.03	0.26	1.60	1.60			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.04	0.00	0.00	0.04	0.04			N/A	N/A
2 - A22 (East)	0.83	0.45	0.97	1.40	1.45			N/A	N/A
3 - A272	0.70	0.45	0.97	1.39	1.45			N/A	N/A
4 - A22 (West)	0.96	0.18	0.99	1.16	1.60			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Batts Bridge Road	0.03	0.00	0.00	0.03	0.03			N/A	N/A
2 - A22 (East)	0.60	0.07	0.73	1.35	1.42			N/A	N/A
3 - A272	0.50	0.05	0.48	1.29	1.40			N/A	N/A
4 - A22 (West)	0.66	0.06	0.66	1.40	1.49			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: M04a-Site Access Roundabout Jacobs 22-04-21.j9
Path: C:\Users\JoeEarp\OneDrive - Motion\gluckf 2001061\Analysis\Junction Modelling
Report generation date: 21/04/2022 14:58:39

»2018 Baseline, AM
»2018 Baseline, PM
»2039 Baseline, AM
»2039 Baseline, PM
»2039 with Downlands Farm, AM
»2039 with Downlands Farm, PM
»2039 with All Developments, AM
»2039 with All Developments, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2018 Baseline							
1 - A22 (North)	D1	1.8	5.34	0.65	D2	2.6	6.97	0.73
2 - Site Access		0.2	4.44	0.18		0.1	4.12	0.08
3 - A22 (South)		1.7	4.31	0.63		1.6	4.16	0.62
	2039 Baseline							
1 - A22 (North)	D3	2.4	6.51	0.71	D4	4.0	9.78	0.81
2 - Site Access		0.2	4.87	0.20		0.1	4.59	0.09
3 - A22 (South)		1.9	4.65	0.66		2.8	6.05	0.74
	2039 with Downlands Farm							
1 - A22 (North)	D5	2.1	5.85	0.68	D6	4.3	10.37	0.82
2 - Site Access		0.2	4.64	0.19		0.1	4.66	0.09
3 - A22 (South)		1.8	4.46	0.64		3.2	6.61	0.76
	2039 with All Developments							
1 - A22 (North)	D7	2.1	5.85	0.68	D8	4.3	10.37	0.82
2 - Site Access		0.2	4.64	0.19		0.1	4.66	0.09
3 - A22 (South)		1.8	4.49	0.64		3.2	6.73	0.77

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	05/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\joeearp
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018 Baseline	PM	ONE HOUR	00:00	01:30	15	✓
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2039 Baseline	PM	ONE HOUR	00:00	01:30	15	✓
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓
D6	2039 with Downlands Farm	PM	ONE HOUR	00:00	01:30	15	✓
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓
D8	2039 with All Developments	PM	ONE HOUR	00:00	01:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A22 (North)	
2	Site Access	
3	A22 (South)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A22 (North)	3.65	9.00	19.0	20.0	50.0	34.0	
2 - Site Access	4.00	7.00	16.4	20.0	50.0	41.0	
3 - A22 (South)	4.15	9.00	60.9	20.0	50.0	42.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A22 (North)	0.648	1931
2 - Site Access	0.601	1717
3 - A22 (South)	0.715	2327

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1125	100.000
2 - Site Access		ONE HOUR	✓	166	100.000
3 - A22 (South)		ONE HOUR	✓	1291	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	32	1093
	2 - Site Access	91	0	75
	3 - A22 (South)	1264	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.65	5.34	1.8	3.2	A	1032	1548
2 - Site Access	0.18	4.44	0.2	0.5	A	152	228
3 - A22 (South)	0.63	4.31	1.7	3.0	A	1185	1777

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	847	212	20	1918	0.442	844	1017	0.0	0.8	3.340	A
2 - Site Access	125	31	820	1225	0.102	125	44	0.0	0.1	3.270	A
3 - A22 (South)	972	243	68	2279	0.427	969	876	0.0	0.7	2.743	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1011	253	24	1916	0.528	1010	1217	0.8	1.1	3.969	A
2 - Site Access	149	37	981	1128	0.132	149	53	0.1	0.2	3.678	A
3 - A22 (South)	1161	290	82	2269	0.512	1159	1049	0.7	1.0	3.242	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1239	310	30	1912	0.648	1236	1489	1.1	1.8	5.300	A
2 - Site Access	183	46	1201	996	0.184	182	65	0.2	0.2	4.425	A
3 - A22 (South)	1421	355	100	2256	0.630	1419	1283	1.0	1.7	4.288	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1239	310	30	1912	0.648	1239	1492	1.8	1.8	5.344	A
2 - Site Access	183	46	1203	994	0.184	183	65	0.2	0.2	4.436	A
3 - A22 (South)	1421	355	100	2256	0.630	1421	1286	1.7	1.7	4.314	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1011	253	24	1916	0.528	1014	1221	1.8	1.1	4.006	A
2 - Site Access	149	37	985	1125	0.133	150	53	0.2	0.2	3.689	A
3 - A22 (South)	1161	290	82	2269	0.512	1163	1053	1.7	1.1	3.265	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	847	212	20	1918	0.442	848	1021	1.1	0.8	3.367	A
2 - Site Access	125	31	824	1222	0.102	125	44	0.2	0.1	3.281	A
3 - A22 (South)	972	243	69	2278	0.427	973	881	1.1	0.7	2.762	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.79	0.55	1.00	1.40	1.45			N/A	N/A
2 - Site Access	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - A22 (South)	0.74	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.11	0.06	0.76	2.29	3.21			N/A	N/A
2 - Site Access	0.15	0.00	0.00	0.15	0.15			N/A	N/A
3 - A22 (South)	1.04	0.06	0.70	2.08	2.95			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.81	0.03	0.26	1.81	1.81			N/A	N/A
2 - Site Access	0.22	0.03	0.25	0.46	0.48			N/A	N/A
3 - A22 (South)	1.68	0.03	0.26	1.68	1.68			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.82	0.03	0.26	1.82	1.82			N/A	N/A
2 - Site Access	0.22	0.03	0.26	0.46	0.49			N/A	N/A
3 - A22 (South)	1.69	0.03	0.26	1.69	1.69			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.13	0.18	1.08	1.68	1.93			N/A	N/A
2 - Site Access	0.15	0.00	0.00	0.15	0.15			N/A	N/A
3 - A22 (South)	1.05	0.35	1.05	1.34	1.69			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.80	0.07	0.76	1.13	1.64			N/A	N/A
2 - Site Access	0.11	0.00	0.00	0.11	0.11			N/A	N/A
3 - A22 (South)	0.75	0.08	0.81	1.01	1.01			N/A	N/A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	5.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1240	100.000
2 - Site Access		ONE HOUR	✓	71	100.000
3 - A22 (South)		ONE HOUR	✓	1300	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	84	1156
	2 - Site Access	39	0	32
	3 - A22 (South)	1230	70	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.73	6.97	2.6	5.3	A	1138	1707
2 - Site Access	0.08	4.12	0.1	0.5	A	65	98
3 - A22 (South)	0.62	4.16	1.6	2.9	A	1193	1789

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	934	233	53	1897	0.492	930	952	0.0	1.0	3.704	A
2 - Site Access	53	13	867	1196	0.045	53	116	0.0	0.0	3.148	A
3 - A22 (South)	979	245	29	2306	0.424	976	891	0.0	0.7	2.700	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1115	279	63	1891	0.590	1113	1140	1.0	1.4	4.617	A
2 - Site Access	64	16	1038	1094	0.058	64	138	0.0	0.1	3.494	A
3 - A22 (South)	1169	292	35	2302	0.508	1168	1066	0.7	1.0	3.169	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1365	341	77	1882	0.726	1361	1395	1.4	2.6	6.848	A
2 - Site Access	78	20	1268	955	0.082	78	169	0.1	0.1	4.105	A
3 - A22 (South)	1431	358	43	2297	0.623	1429	1304	1.0	1.6	4.136	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1365	341	77	1882	0.726	1365	1397	2.6	2.6	6.967	A
2 - Site Access	78	20	1273	953	0.082	78	170	0.1	0.1	4.116	A
3 - A22 (South)	1431	358	43	2297	0.623	1431	1308	1.6	1.6	4.159	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1115	279	63	1891	0.590	1119	1143	2.6	1.5	4.696	A
2 - Site Access	64	16	1044	1090	0.059	64	139	0.1	0.1	3.507	A
3 - A22 (South)	1169	292	35	2302	0.508	1171	1072	1.6	1.0	3.190	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	934	233	53	1897	0.492	935	957	1.5	1.0	3.749	A
2 - Site Access	53	13	872	1193	0.045	54	116	0.1	0.0	3.158	A
3 - A22 (South)	979	245	29	2306	0.424	980	896	1.0	0.7	2.715	A

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.96	0.55	1.00	1.40	1.45			N/A	N/A
2 - Site Access	0.05	0.00	0.00	0.05	0.05			N/A	N/A
3 - A22 (South)	0.73	0.55	1.00	1.40	1.45			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.42	0.05	0.54	3.51	5.31			N/A	N/A
2 - Site Access	0.06	0.03	0.25	0.45	0.48			N/A	N/A
3 - A22 (South)	1.02	0.06	0.72	1.99	2.87			N/A	N/A

00:30 - 00:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.57	0.03	0.27	2.57	4.45			N/A	N/A
2 - Site Access	0.09	0.03	0.26	0.47	0.49			N/A	N/A
3 - A22 (South)	1.63	0.03	0.26	1.63	1.63			N/A	N/A

00:45 - 01:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.61	0.03	0.27	2.61	2.61			N/A	N/A
2 - Site Access	0.09	0.00	0.00	0.09	0.09			N/A	N/A
3 - A22 (South)	1.64	0.03	0.26	1.64	1.64			N/A	N/A

01:00 - 01:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.45	0.09	1.10	2.88	3.88			N/A	N/A
2 - Site Access	0.06	0.00	0.00	0.06	0.06			N/A	N/A
3 - A22 (South)	1.04	0.43	1.04	1.21	1.62			N/A	N/A

01:15 - 01:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.98	0.05	0.50	2.08	3.07			N/A	N/A
2 - Site Access	0.05	0.00	0.00	0.05	0.05			N/A	N/A
3 - A22 (South)	0.74	0.09	0.82	1.41	1.48			N/A	N/A

2039 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	5.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1235	100.000
2 - Site Access		ONE HOUR	✓	166	100.000
3 - A22 (South)		ONE HOUR	✓	1346	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	32	1203
	2 - Site Access	91	0	75
	3 - A22 (South)	1319	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.71	6.51	2.4	4.9	A	1133	1700
2 - Site Access	0.20	4.87	0.2	0.8	A	152	228
3 - A22 (South)	0.66	4.65	1.9	3.7	A	1235	1853

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	930	232	20	1918	0.485	926	1058	0.0	0.9	3.615	A
2 - Site Access	125	31	902	1175	0.106	124	44	0.0	0.1	3.424	A
3 - A22 (South)	1013	253	68	2279	0.445	1010	958	0.0	0.8	2.831	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1110	278	24	1916	0.580	1109	1266	0.9	1.4	4.449	A
2 - Site Access	149	37	1080	1068	0.140	149	53	0.1	0.2	3.916	A
3 - A22 (South)	1210	303	82	2269	0.533	1209	1147	0.8	1.1	3.390	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1360	340	30	1912	0.711	1356	1549	1.4	2.4	6.418	A
2 - Site Access	183	46	1320	924	0.198	182	65	0.2	0.2	4.853	A
3 - A22 (South)	1482	370	100	2256	0.657	1479	1403	1.1	1.9	4.616	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1360	340	30	1912	0.711	1360	1552	2.4	2.4	6.510	A
2 - Site Access	183	46	1324	921	0.198	183	65	0.2	0.2	4.873	A
3 - A22 (South)	1482	370	100	2256	0.657	1482	1407	1.9	1.9	4.652	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1110	278	24	1916	0.580	1114	1271	2.4	1.4	4.515	A
2 - Site Access	149	37	1086	1065	0.140	150	53	0.2	0.2	3.933	A
3 - A22 (South)	1210	303	82	2269	0.533	1213	1153	1.9	1.2	3.421	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	930	232	20	1918	0.485	932	1063	1.4	0.9	3.654	A
2 - Site Access	125	31	907	1172	0.107	125	44	0.2	0.1	3.441	A
3 - A22 (South)	1013	253	69	2278	0.445	1015	964	1.2	0.8	2.851	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.93	0.55	1.00	1.40	1.45			N/A	N/A
2 - Site Access	0.12	0.00	0.00	0.12	0.12			N/A	N/A
3 - A22 (South)	0.80	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.36	0.05	0.58	3.29	4.91			N/A	N/A
2 - Site Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
3 - A22 (South)	1.13	0.05	0.63	2.54	3.68			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.40	0.03	0.27	2.40	3.02			N/A	N/A
2 - Site Access	0.25	0.03	0.25	0.46	0.48			N/A	N/A
3 - A22 (South)	1.89	0.03	0.26	1.89	1.89			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.43	0.03	0.26	2.43	2.43			N/A	N/A
2 - Site Access	0.25	0.03	0.27	0.49	0.83			N/A	N/A
3 - A22 (South)	1.90	0.03	0.26	1.90	1.90			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.39	0.10	1.12	2.64	3.47			N/A	N/A
2 - Site Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
3 - A22 (South)	1.15	0.23	1.10	1.67	1.91			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.95	0.05	0.60	1.91	2.78			N/A	N/A
2 - Site Access	0.12	0.00	0.00	0.12	0.12			N/A	N/A
3 - A22 (South)	0.81	0.07	0.79	1.10	1.61			N/A	N/A

2039 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	7.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2039 Baseline	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1376	100.000
2 - Site Access		ONE HOUR	✓	71	100.000
3 - A22 (South)		ONE HOUR	✓	1546	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	84	1292
	2 - Site Access	39	0	32
	3 - A22 (South)	1476	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.81	9.78	4.0	16.5	A	1263	1894
2 - Site Access	0.09	4.59	0.1	0.5	A	65	98
3 - A22 (South)	0.74	6.05	2.8	6.3	A	1419	2128

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1036	259	53	1897	0.546	1031	1137	0.0	1.2	4.134	A
2 - Site Access	53	13	968	1135	0.047	53	115	0.0	0.0	3.326	A
3 - A22 (South)	1164	291	29	2307	0.505	1160	992	0.0	1.0	3.130	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1237	309	63	1891	0.654	1234	1360	1.2	1.9	5.461	A
2 - Site Access	64	16	1159	1021	0.063	64	138	0.0	0.1	3.760	A
3 - A22 (South)	1390	347	35	2302	0.604	1388	1188	1.0	1.5	3.927	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1515	379	77	1882	0.805	1507	1663	1.9	3.9	9.398	A
2 - Site Access	78	20	1415	867	0.090	78	169	0.1	0.1	4.562	A
3 - A22 (South)	1702	426	43	2297	0.741	1697	1450	1.5	2.8	5.952	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1515	379	77	1882	0.805	1515	1668	3.9	4.0	9.783	A
2 - Site Access	78	20	1422	863	0.091	78	170	0.1	0.1	4.588	A
3 - A22 (South)	1702	426	43	2297	0.741	1702	1457	2.8	2.8	6.049	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1237	309	63	1891	0.654	1245	1367	4.0	1.9	5.652	A
2 - Site Access	64	16	1169	1015	0.063	64	139	0.1	0.1	3.789	A
3 - A22 (South)	1390	347	35	2302	0.604	1395	1198	2.8	1.5	3.991	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1036	259	53	1897	0.546	1039	1143	1.9	1.2	4.206	A
2 - Site Access	53	13	975	1131	0.047	54	116	0.1	0.0	3.342	A
3 - A22 (South)	1164	291	29	2306	0.505	1166	999	1.5	1.0	3.161	A

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.19	0.55	1.00	1.40	1.45			N/A	N/A
2 - Site Access	0.05	0.00	0.00	0.05	0.05			N/A	N/A
3 - A22 (South)	1.01	0.55	1.00	1.40	1.45			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.86	0.05	0.47	4.96	8.07			N/A	N/A
2 - Site Access	0.07	0.03	0.25	0.45	0.48			N/A	N/A
3 - A22 (South)	1.51	0.05	0.46	3.89	6.25			N/A	N/A

00:30 - 00:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	3.93	0.03	0.30	3.93	16.47			N/A	N/A
2 - Site Access	0.10	0.03	0.26	0.47	0.49			N/A	N/A
3 - A22 (South)	2.79	0.03	0.27	2.79	3.94			N/A	N/A

00:45 - 01:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	4.02	0.03	0.27	4.02	5.72			N/A	N/A
2 - Site Access	0.10	0.00	0.00	0.10	0.10			N/A	N/A
3 - A22 (South)	2.83	0.03	0.26	2.83	2.83			N/A	N/A

01:00 - 01:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.93	0.06	0.82	4.87	7.32			N/A	N/A
2 - Site Access	0.07	0.00	0.00	0.07	0.07			N/A	N/A
3 - A22 (South)	1.54	0.09	1.16	3.00	4.04			N/A	N/A

01:15 - 01:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.21	0.04	0.39	3.10	5.45			N/A	N/A
2 - Site Access	0.05	0.00	0.00	0.05	0.05			N/A	N/A
3 - A22 (South)	1.03	0.05	0.53	2.24	3.30			N/A	N/A

2039 with Downlands Farm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	5.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1178	100.000
2 - Site Access		ONE HOUR	✓	166	100.000
3 - A22 (South)		ONE HOUR	✓	1316	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	32	1146
	2 - Site Access	91	0	75
	3 - A22 (South)	1289	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.68	5.85	2.1	4.0	A	1081	1621
2 - Site Access	0.19	4.64	0.2	0.5	A	152	228
3 - A22 (South)	0.64	4.46	1.8	3.3	A	1208	1811

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	887	222	20	1918	0.462	883	1036	0.0	0.9	3.467	A
2 - Site Access	125	31	859	1201	0.104	125	44	0.0	0.1	3.342	A
3 - A22 (South)	991	248	68	2279	0.435	988	916	0.0	0.8	2.781	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1059	265	24	1916	0.553	1058	1239	0.9	1.2	4.188	A
2 - Site Access	149	37	1029	1099	0.136	149	53	0.1	0.2	3.789	A
3 - A22 (South)	1183	296	82	2269	0.521	1182	1096	0.8	1.1	3.306	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1297	324	30	1912	0.678	1294	1517	1.2	2.1	5.783	A
2 - Site Access	183	46	1258	961	0.190	182	65	0.2	0.2	4.620	A
3 - A22 (South)	1449	362	100	2256	0.642	1446	1341	1.1	1.8	4.431	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1297	324	30	1912	0.678	1297	1519	2.1	2.1	5.848	A
2 - Site Access	183	46	1262	959	0.191	183	65	0.2	0.2	4.636	A
3 - A22 (South)	1449	362	100	2256	0.642	1449	1344	1.8	1.8	4.461	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1059	265	24	1916	0.553	1062	1243	2.1	1.2	4.236	A
2 - Site Access	149	37	1033	1096	0.136	150	53	0.2	0.2	3.802	A
3 - A22 (South)	1183	296	82	2269	0.521	1186	1101	1.8	1.1	3.334	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	887	222	20	1918	0.462	888	1040	1.2	0.9	3.499	A
2 - Site Access	125	31	864	1198	0.104	125	44	0.2	0.1	3.358	A
3 - A22 (South)	991	248	69	2278	0.435	992	921	1.1	0.8	2.800	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.85	0.55	1.00	1.40	1.45			N/A	N/A
2 - Site Access	0.12	0.00	0.00	0.12	0.12			N/A	N/A
3 - A22 (South)	0.77	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.22	0.06	0.68	2.76	3.96			N/A	N/A
2 - Site Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
3 - A22 (South)	1.08	0.06	0.67	2.31	3.29			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.07	0.03	0.27	2.07	2.07			N/A	N/A
2 - Site Access	0.23	0.03	0.25	0.46	0.48			N/A	N/A
3 - A22 (South)	1.77	0.03	0.26	1.77	1.77			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.09	0.03	0.26	2.09	2.09			N/A	N/A
2 - Site Access	0.23	0.03	0.26	0.47	0.50			N/A	N/A
3 - A22 (South)	1.78	0.03	0.26	1.78	1.78			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.25	0.13	1.12	1.96	2.63			N/A	N/A
2 - Site Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
3 - A22 (South)	1.10	0.28	1.07	1.52	1.80			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.87	0.06	0.71	1.58	1.98			N/A	N/A
2 - Site Access	0.12	0.00	0.00	0.12	0.12			N/A	N/A
3 - A22 (South)	0.77	0.08	0.80	1.37	1.37			N/A	N/A

2039 with Downlands Farm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	8.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Downlands Farm	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1395	100.000
2 - Site Access		ONE HOUR	✓	71	100.000
3 - A22 (South)		ONE HOUR	✓	1592	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	84	1311
	2 - Site Access	39	0	32
	3 - A22 (South)	1522	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.82	10.37	4.3	18.8	B	1280	1920
2 - Site Access	0.09	4.66	0.1	0.5	A	65	98
3 - A22 (South)	0.76	6.61	3.2	7.0	A	1461	2191

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1050	263	53	1897	0.554	1045	1171	0.0	1.2	4.200	A
2 - Site Access	53	13	982	1127	0.047	53	115	0.0	0.0	3.352	A
3 - A22 (South)	1199	300	29	2307	0.520	1194	1006	0.0	1.1	3.225	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1254	314	63	1891	0.663	1251	1401	1.2	1.9	5.605	A
2 - Site Access	64	16	1176	1011	0.063	64	138	0.0	0.1	3.801	A
3 - A22 (South)	1431	358	35	2302	0.622	1429	1205	1.1	1.6	4.112	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1536	384	77	1882	0.816	1527	1713	1.9	4.2	9.899	A
2 - Site Access	78	20	1435	855	0.091	78	169	0.1	0.1	4.633	A
3 - A22 (South)	1753	438	43	2297	0.763	1747	1470	1.6	3.1	6.475	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1536	384	77	1882	0.816	1535	1719	4.2	4.3	10.366	B
2 - Site Access	78	20	1443	850	0.092	78	170	0.1	0.1	4.662	A
3 - A22 (South)	1753	438	43	2297	0.763	1753	1478	3.1	3.2	6.610	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1254	314	63	1891	0.663	1263	1409	4.3	2.0	5.823	A
2 - Site Access	64	16	1187	1004	0.064	64	139	0.1	0.1	3.829	A
3 - A22 (South)	1431	358	35	2302	0.622	1437	1216	3.2	1.7	4.191	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1050	263	53	1897	0.554	1053	1177	2.0	1.3	4.280	A
2 - Site Access	53	13	990	1122	0.048	54	116	0.1	0.1	3.369	A
3 - A22 (South)	1199	300	29	2306	0.520	1201	1014	1.7	1.1	3.262	A

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.23	0.55	1.00	1.40	1.45			N/A	N/A
2 - Site Access	0.05	0.00	0.00	0.05	0.05			N/A	N/A
3 - A22 (South)	1.07	0.55	1.00	1.40	1.45			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.93	0.05	0.46	5.20	8.53			N/A	N/A
2 - Site Access	0.07	0.03	0.25	0.45	0.48			N/A	N/A
3 - A22 (South)	1.62	0.04	0.45	4.29	7.02			N/A	N/A

00:30 - 00:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	4.20	0.03	0.30	4.20	18.82			N/A	N/A
2 - Site Access	0.10	0.03	0.26	0.47	0.49			N/A	N/A
3 - A22 (South)	3.13	0.03	0.28	3.13	6.56			N/A	N/A

00:45 - 01:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	4.31	0.03	0.28	4.31	7.56			N/A	N/A
2 - Site Access	0.10	0.00	0.00	0.10	0.10			N/A	N/A
3 - A22 (South)	3.17	0.03	0.27	3.17	3.17			N/A	N/A

01:00 - 01:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.01	0.06	0.76	5.19	7.90			N/A	N/A
2 - Site Access	0.07	0.00	0.00	0.07	0.07			N/A	N/A
3 - A22 (South)	1.66	0.08	1.12	3.61	4.92			N/A	N/A

01:15 - 01:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.25	0.04	0.38	3.20	5.78			N/A	N/A
2 - Site Access	0.05	0.00	0.00	0.05	0.05			N/A	N/A
3 - A22 (South)	1.09	0.05	0.47	2.59	3.91			N/A	N/A

2039 with All Developments, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	5.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1178	100.000
2 - Site Access		ONE HOUR	✓	166	100.000
3 - A22 (South)		ONE HOUR	✓	1320	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	32	1146
	2 - Site Access	91	0	75
	3 - A22 (South)	1293	27	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.68	5.85	2.1	4.0	A	1081	1621
2 - Site Access	0.19	4.64	0.2	0.5	A	152	228
3 - A22 (South)	0.64	4.49	1.8	3.3	A	1211	1817

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	887	222	20	1918	0.462	883	1039	0.0	0.9	3.467	A
2 - Site Access	125	31	859	1201	0.104	125	44	0.0	0.1	3.342	A
3 - A22 (South)	994	248	68	2279	0.436	991	916	0.0	0.8	2.788	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1059	265	24	1916	0.553	1058	1243	0.9	1.2	4.188	A
2 - Site Access	149	37	1029	1099	0.136	149	53	0.1	0.2	3.789	A
3 - A22 (South)	1187	297	82	2269	0.523	1185	1096	0.8	1.1	3.317	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1297	324	30	1912	0.678	1294	1521	1.2	2.1	5.783	A
2 - Site Access	183	46	1258	961	0.190	182	65	0.2	0.2	4.620	A
3 - A22 (South)	1453	363	100	2256	0.644	1451	1341	1.1	1.8	4.455	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1297	324	30	1912	0.678	1297	1524	2.1	2.1	5.848	A
2 - Site Access	183	46	1262	959	0.191	183	65	0.2	0.2	4.636	A
3 - A22 (South)	1453	363	100	2256	0.644	1453	1344	1.8	1.8	4.486	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1059	265	24	1916	0.553	1062	1247	2.1	1.2	4.234	A
2 - Site Access	149	37	1033	1096	0.136	150	53	0.2	0.2	3.805	A
3 - A22 (South)	1187	297	82	2269	0.523	1189	1101	1.8	1.1	3.343	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	887	222	20	1918	0.462	888	1043	1.2	0.9	3.502	A
2 - Site Access	125	31	864	1198	0.104	125	44	0.2	0.1	3.358	A
3 - A22 (South)	994	248	69	2278	0.436	995	921	1.1	0.8	2.809	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.85	0.55	1.00	1.40	1.45			N/A	N/A
2 - Site Access	0.12	0.00	0.00	0.12	0.12			N/A	N/A
3 - A22 (South)	0.77	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.22	0.06	0.68	2.76	3.96			N/A	N/A
2 - Site Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
3 - A22 (South)	1.09	0.06	0.67	2.34	3.35			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.07	0.03	0.27	2.07	2.07			N/A	N/A
2 - Site Access	0.23	0.03	0.25	0.46	0.48			N/A	N/A
3 - A22 (South)	1.79	0.03	0.26	1.79	1.79			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.09	0.03	0.26	2.09	2.09			N/A	N/A
2 - Site Access	0.23	0.03	0.26	0.47	0.50			N/A	N/A
3 - A22 (South)	1.80	0.03	0.26	1.80	1.80			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.25	0.13	1.12	1.96	2.63			N/A	N/A
2 - Site Access	0.16	0.00	0.00	0.16	0.16			N/A	N/A
3 - A22 (South)	1.10	0.27	1.08	1.54	1.81			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.87	0.06	0.71	1.58	1.98			N/A	N/A
2 - Site Access	0.12	0.00	0.00	0.12	0.12			N/A	N/A
3 - A22 (South)	0.78	0.08	0.80	1.41	1.41			N/A	N/A

2039 with All Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	8.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 with All Developments	PM	ONE HOUR	00:00	01:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1395	100.000
2 - Site Access		ONE HOUR	✓	71	100.000
3 - A22 (South)		ONE HOUR	✓	1601	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	84	1311
	2 - Site Access	39	0	32
	3 - A22 (South)	1531	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.82	10.37	4.3	18.8	B	1280	1920
2 - Site Access	0.09	4.66	0.1	0.5	A	65	98
3 - A22 (South)	0.77	6.73	3.2	7.2	A	1469	2204

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1050	263	53	1897	0.554	1045	1178	0.0	1.2	4.200	A
2 - Site Access	53	13	982	1127	0.047	53	115	0.0	0.0	3.352	A
3 - A22 (South)	1205	301	29	2307	0.523	1201	1006	0.0	1.1	3.245	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1254	314	63	1891	0.663	1251	1409	1.2	1.9	5.605	A
2 - Site Access	64	16	1176	1011	0.063	64	138	0.0	0.1	3.801	A
3 - A22 (South)	1439	360	35	2302	0.625	1437	1205	1.1	1.6	4.149	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1536	384	77	1882	0.816	1527	1723	1.9	4.2	9.898	A
2 - Site Access	78	20	1435	855	0.091	78	169	0.1	0.1	4.633	A
3 - A22 (South)	1763	441	43	2297	0.767	1757	1470	1.6	3.2	6.587	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1536	384	77	1882	0.816	1535	1728	4.2	4.3	10.366	B
2 - Site Access	78	20	1443	850	0.092	78	170	0.1	0.1	4.662	A
3 - A22 (South)	1763	441	43	2297	0.768	1763	1478	3.2	3.2	6.733	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1254	314	63	1890	0.663	1263	1417	4.3	2.0	5.821	A
2 - Site Access	64	16	1187	1004	0.064	64	139	0.1	0.1	3.832	A
3 - A22 (South)	1439	360	35	2302	0.625	1446	1216	3.2	1.7	4.233	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1050	263	53	1897	0.554	1053	1184	2.0	1.3	4.280	A
2 - Site Access	53	13	990	1122	0.048	54	116	0.1	0.1	3.367	A
3 - A22 (South)	1205	301	29	2306	0.523	1208	1014	1.7	1.1	3.285	A

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.23	0.55	1.00	1.40	1.45			N/A	N/A
2 - Site Access	0.05	0.00	0.00	0.05	0.05			N/A	N/A
3 - A22 (South)	1.09	0.55	1.00	1.40	1.45			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.93	0.05	0.46	5.20	8.53			N/A	N/A
2 - Site Access	0.07	0.03	0.25	0.45	0.48			N/A	N/A
3 - A22 (South)	1.65	0.04	0.44	4.37	7.19			N/A	N/A

00:30 - 00:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	4.20	0.03	0.30	4.20	18.82			N/A	N/A
2 - Site Access	0.10	0.03	0.26	0.47	0.49			N/A	N/A
3 - A22 (South)	3.20	0.03	0.28	3.20	7.16			N/A	N/A

00:45 - 01:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	4.31	0.03	0.28	4.31	7.56			N/A	N/A
2 - Site Access	0.10	0.00	0.00	0.10	0.10			N/A	N/A
3 - A22 (South)	3.25	0.03	0.27	3.25	3.25			N/A	N/A

01:00 - 01:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.01	0.06	0.76	5.19	7.90			N/A	N/A
2 - Site Access	0.07	0.00	0.00	0.07	0.07			N/A	N/A
3 - A22 (South)	1.69	0.08	1.11	3.71	5.11			N/A	N/A

01:15 - 01:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.25	0.04	0.38	3.20	5.78			N/A	N/A
2 - Site Access	0.05	0.00	0.00	0.05	0.05			N/A	N/A
3 - A22 (South)	1.10	0.05	0.46	2.65	4.01			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: M05a-Copwood Roundabout Jacobs 22-02-18.j9
Path: C:\Users\JoeEarp\OneDrive - Motion\TP Projects\gluckf 2001061\Analysis\Junction Modelling
Report generation date: 18/02/2022 11:07:59

»2018 Baseline, AM
»2018 Baseline, PM
»2039 Baseline, AM
»2039 Baseline, PM
»2039 with Downlands Farm, AM
»2039 with Downlands Farm, PM
»2039 with All Developments, AM
»2039 with All Developments, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2018 Baseline							
1 - A22 (North)	D1	1.7	5.07	0.63	D2	1.5	4.36	0.61
2 - Bellfarm Road		0.4	2.79	0.27		1.1	4.66	0.53
3 - A22 (South)		3.7	9.10	0.79		1.3	4.68	0.56
	2039 Baseline							
1 - A22 (North)	D3	2.1	5.78	0.68	D4	2.1	5.35	0.68
2 - Bellfarm Road		0.5	3.19	0.32		1.3	5.36	0.57
3 - A22 (South)		3.8	9.31	0.80		2.6	7.35	0.72
	2039 with Downlands Farm							
1 - A22 (North)	D5	2.3	6.23	0.70	D6	2.1	5.37	0.68
2 - Bellfarm Road		0.5	3.24	0.33		1.3	5.35	0.57
3 - A22 (South)		3.8	9.33	0.80		2.9	8.13	0.75
	2039 with All Developments							
1 - A22 (North)	D7	2.3	6.23	0.70	D8	2.1	5.42	0.68
2 - Bellfarm Road		0.5	3.36	0.35		1.3	5.35	0.57
3 - A22 (South)		3.7	9.19	0.79		3.0	8.31	0.75

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	05/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\joeearp
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - Bellfarm Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	6.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A22 (North)	
2	Bellfarm Road	
3	A22 (South)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A22 (North)	3.40	7.40	61.0	29.5	53.0	10.5	
2 - Bellfarm Road	3.50	7.80	98.0	37.0	53.0	11.5	
3 - A22 (South)	3.60	7.60	58.8	22.5	53.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A22 (North)	0.711	2201
2 - Bellfarm Road	0.747	2394
3 - A22 (South)	0.670	2097

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1093	100.000
2 - Bellfarm Road		ONE HOUR	✓	439	100.000
3 - A22 (South)		ONE HOUR	✓	1372	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	336	757
	2 - Bellfarm Road	261	0	178
	3 - A22 (South)	1003	369	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Bellfarm Road	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.63	5.07	1.7	2.7	A	1003	1504
2 - Bellfarm Road	0.27	2.79	0.4	1.5	A	403	604
3 - A22 (South)	0.79	9.10	3.7	13.9	A	1259	1888

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	823	206	277	2005	0.410	820	948	0.0	0.7	3.033	A
2 - Bellfarm Road	331	83	568	1970	0.168	330	529	0.0	0.2	2.194	A
3 - A22 (South)	1033	258	196	1966	0.525	1029	702	0.0	1.1	3.822	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	983	246	331	1966	0.500	981	1134	0.7	1.0	3.650	A
2 - Bellfarm Road	395	99	680	1886	0.209	394	633	0.2	0.3	2.413	A
3 - A22 (South)	1233	308	234	1940	0.636	1231	840	1.1	1.7	5.055	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1203	301	404	1914	0.629	1201	1386	1.0	1.7	5.026	A
2 - Bellfarm Road	483	121	832	1773	0.273	483	773	0.3	0.4	2.791	A
3 - A22 (South)	1511	378	287	1905	0.793	1503	1027	1.7	3.7	8.779	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1203	301	406	1913	0.629	1203	1391	1.7	1.7	5.074	A
2 - Bellfarm Road	483	121	833	1771	0.273	483	776	0.4	0.4	2.794	A
3 - A22 (South)	1511	378	287	1905	0.793	1510	1029	3.7	3.7	9.097	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	983	246	334	1964	0.500	985	1142	1.7	1.0	3.686	A
2 - Bellfarm Road	395	99	682	1884	0.209	395	637	0.4	0.3	2.418	A
3 - A22 (South)	1233	308	235	1940	0.636	1241	843	3.7	1.8	5.206	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	823	206	279	2004	0.411	824	954	1.0	0.7	3.057	A
2 - Bellfarm Road	331	83	571	1967	0.168	331	532	0.3	0.2	2.199	A
3 - A22 (South)	1033	258	197	1966	0.525	1036	705	1.8	1.1	3.880	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.69	0.55	1.00	1.40	1.45			N/A	N/A
2 - Bellfarm Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
3 - A22 (South)	1.10	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.99	0.06	0.75	1.88	2.65			N/A	N/A
2 - Bellfarm Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
3 - A22 (South)	1.72	0.05	0.46	4.57	7.42			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.67	0.03	0.26	1.67	1.67			N/A	N/A
2 - Bellfarm Road	0.37	0.03	0.25	0.45	0.48			N/A	N/A
3 - A22 (South)	3.66	0.03	0.29	3.66	13.91			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.68	0.03	0.26	1.68	1.68			N/A	N/A
2 - Bellfarm Road	0.37	0.03	0.33	1.22	1.46			N/A	N/A
3 - A22 (South)	3.74	0.03	0.27	3.74	4.20			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.01	0.23	1.02	1.29	1.67			N/A	N/A
2 - Bellfarm Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3 - A22 (South)	1.77	0.06	0.89	4.32	6.32			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.70	0.07	0.72	1.00	1.00			N/A	N/A
2 - Bellfarm Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
3 - A22 (South)	1.12	0.04	0.40	2.81	4.77			N/A	N/A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - Bellfarm Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1156	100.000
2 - Bellfarm Road		ONE HOUR	✓	807	100.000
3 - A22 (South)		ONE HOUR	✓	892	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	265	891
	2 - Bellfarm Road	470	0	337
	3 - A22 (South)	761	131	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Bellfarm Road	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.61	4.36	1.5	2.4	A	1061	1591
2 - Bellfarm Road	0.53	4.66	1.1	1.5	A	741	1111
3 - A22 (South)	0.56	4.68	1.3	1.5	A	819	1228

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	870	218	98	2132	0.408	868	924	0.0	0.7	2.842	A
2 - Bellfarm Road	608	152	669	1894	0.321	606	297	0.0	0.5	2.790	A
3 - A22 (South)	672	168	353	1861	0.361	669	922	0.0	0.6	3.015	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1039	260	118	2118	0.491	1038	1105	0.7	1.0	3.331	A
2 - Bellfarm Road	725	181	800	1796	0.404	725	356	0.5	0.7	3.359	A
3 - A22 (South)	802	200	422	1815	0.442	801	1103	0.6	0.8	3.547	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1273	318	144	2099	0.606	1271	1353	1.0	1.5	4.332	A
2 - Bellfarm Road	889	222	979	1662	0.535	887	435	0.7	1.1	4.630	A
3 - A22 (South)	982	246	516	1752	0.561	980	1350	0.8	1.3	4.655	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1273	318	144	2099	0.606	1273	1355	1.5	1.5	4.356	A
2 - Bellfarm Road	889	222	981	1661	0.535	888	436	1.1	1.1	4.660	A
3 - A22 (South)	982	246	517	1751	0.561	982	1352	1.3	1.3	4.681	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1039	260	118	2118	0.491	1041	1109	1.5	1.0	3.354	A
2 - Bellfarm Road	725	181	803	1794	0.404	727	357	1.1	0.7	3.382	A
3 - A22 (South)	802	200	424	1814	0.442	804	1106	1.3	0.8	3.572	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	870	218	99	2131	0.408	871	928	1.0	0.7	2.861	A
2 - Bellfarm Road	608	152	672	1892	0.321	608	299	0.7	0.5	2.807	A
3 - A22 (South)	672	168	354	1860	0.361	672	926	0.8	0.6	3.032	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.69	0.55	1.00	1.40	1.45			N/A	N/A
2 - Bellfarm Road	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3 - A22 (South)	0.56	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.96	0.06	0.77	1.77	2.40			N/A	N/A
2 - Bellfarm Road	0.67	0.08	0.76	1.37	1.45			N/A	N/A
3 - A22 (South)	0.79	0.08	0.80	1.46	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.52	0.03	0.26	1.52	1.52			N/A	N/A
2 - Bellfarm Road	1.14	0.03	0.26	1.14	1.14			N/A	N/A
3 - A22 (South)	1.26	0.03	0.26	1.26	1.26			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.53	0.03	0.26	1.53	1.53			N/A	N/A
2 - Bellfarm Road	1.14	0.03	0.27	1.14	1.31			N/A	N/A
3 - A22 (South)	1.27	0.03	0.27	1.27	1.27			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.97	0.43	1.01	1.33	1.33			N/A	N/A
2 - Bellfarm Road	0.68	0.39	0.97	1.39	1.45			N/A	N/A
3 - A22 (South)	0.80	0.46	0.97	1.40	1.45			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.69	0.08	0.80	1.38	1.45			N/A	N/A
2 - Bellfarm Road	0.48	0.04	0.41	1.24	1.37			N/A	N/A
3 - A22 (South)	0.57	0.06	0.67	1.34	1.42			N/A	N/A

2039 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - Bellfarm Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	6.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1202	100.000
2 - Bellfarm Road		ONE HOUR	✓	491	100.000
3 - A22 (South)		ONE HOUR	✓	1369	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	319	883
	2 - Bellfarm Road	278	0	213
	3 - A22 (South)	1042	327	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Bellfarm Road	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.68	5.78	2.1	3.9	A	1103	1654
2 - Bellfarm Road	0.32	3.19	0.5	1.9	A	451	676
3 - A22 (South)	0.80	9.31	3.8	14.7	A	1256	1884

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	905	226	245	2027	0.446	902	990	0.0	0.8	3.189	A
2 - Bellfarm Road	370	92	662	1899	0.195	369	484	0.0	0.2	2.351	A
3 - A22 (South)	1031	258	209	1958	0.526	1026	822	0.0	1.1	3.848	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1081	270	293	1993	0.542	1079	1185	0.8	1.2	3.932	A
2 - Bellfarm Road	441	110	793	1802	0.245	441	580	0.2	0.3	2.646	A
3 - A22 (South)	1231	308	250	1930	0.638	1228	984	1.1	1.7	5.109	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1323	331	358	1947	0.680	1320	1447	1.2	2.1	5.707	A
2 - Bellfarm Road	541	135	970	1670	0.324	540	708	0.3	0.5	3.185	A
3 - A22 (South)	1507	377	306	1893	0.796	1499	1204	1.7	3.7	8.970	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1323	331	360	1946	0.680	1323	1453	2.1	2.1	5.782	A
2 - Bellfarm Road	541	135	972	1668	0.324	541	711	0.5	0.5	3.193	A
3 - A22 (South)	1507	377	306	1893	0.796	1507	1207	3.7	3.8	9.313	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1081	270	296	1991	0.543	1084	1193	2.1	1.2	3.984	A
2 - Bellfarm Road	441	110	796	1799	0.245	442	584	0.5	0.3	2.655	A
3 - A22 (South)	1231	308	250	1930	0.638	1239	988	3.8	1.8	5.268	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	905	226	247	2026	0.447	906	996	1.2	0.8	3.221	A
2 - Bellfarm Road	370	92	666	1896	0.195	370	487	0.3	0.2	2.358	A
3 - A22 (South)	1031	258	209	1957	0.527	1033	826	1.8	1.1	3.907	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.80	0.55	1.00	1.40	1.45			N/A	N/A
2 - Bellfarm Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A22 (South)	1.10	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.17	0.05	0.62	2.67	3.86			N/A	N/A
2 - Bellfarm Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A22 (South)	1.73	0.05	0.46	4.61	7.51			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.08	0.03	0.27	2.08	2.08			N/A	N/A
2 - Bellfarm Road	0.48	0.03	0.25	0.48	0.48			N/A	N/A
3 - A22 (South)	3.73	0.03	0.29	3.73	14.67			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.10	0.03	0.26	2.10	2.10			N/A	N/A
2 - Bellfarm Road	0.48	0.03	0.32	1.44	1.94			N/A	N/A
3 - A22 (South)	3.82	0.03	0.27	3.82	4.70			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.20	0.13	1.09	1.88	2.43			N/A	N/A
2 - Bellfarm Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
3 - A22 (South)	1.79	0.06	0.87	4.41	6.48			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.81	0.06	0.66	1.44	1.88			N/A	N/A
2 - Bellfarm Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A22 (South)	1.12	0.04	0.39	2.84	4.86			N/A	N/A

2039 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - Bellfarm Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	6.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1292	100.000
2 - Bellfarm Road		ONE HOUR	✓	811	100.000
3 - A22 (South)		ONE HOUR	✓	1153	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	284	1008
	2 - Bellfarm Road	459	0	352
	3 - A22 (South)	1017	136	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Bellfarm Road	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.68	5.35	2.1	4.1	A	1186	1778
2 - Bellfarm Road	0.57	5.36	1.3	1.4	A	744	1116
3 - A22 (South)	0.72	7.35	2.6	4.7	A	1058	1587

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	973	243	102	2129	0.457	969	1107	0.0	0.8	3.095	A
2 - Bellfarm Road	611	153	756	1829	0.334	609	315	0.0	0.5	2.945	A
3 - A22 (South)	868	217	344	1867	0.465	865	1020	0.0	0.9	3.580	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1161	290	122	2115	0.549	1160	1325	0.8	1.2	3.763	A
2 - Bellfarm Road	729	182	905	1718	0.424	728	377	0.5	0.7	3.634	A
3 - A22 (South)	1037	259	412	1822	0.569	1035	1221	0.9	1.3	4.565	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1423	356	149	2095	0.679	1419	1620	1.2	2.1	5.294	A
2 - Bellfarm Road	893	223	1107	1567	0.570	891	461	0.7	1.3	5.306	A
3 - A22 (South)	1269	317	504	1760	0.721	1265	1494	1.3	2.5	7.198	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1423	356	150	2095	0.679	1422	1625	2.1	2.1	5.350	A
2 - Bellfarm Road	893	223	1110	1565	0.571	893	462	1.3	1.3	5.357	A
3 - A22 (South)	1269	317	505	1759	0.722	1269	1497	2.5	2.6	7.345	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1161	290	123	2114	0.549	1165	1332	2.1	1.2	3.808	A
2 - Bellfarm Road	729	182	909	1715	0.425	731	379	1.3	0.7	3.668	A
3 - A22 (South)	1037	259	414	1820	0.569	1041	1226	2.6	1.3	4.649	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	973	243	103	2129	0.457	974	1113	1.2	0.8	3.122	A
2 - Bellfarm Road	611	153	760	1826	0.334	612	317	0.7	0.5	2.968	A
3 - A22 (South)	868	217	346	1866	0.465	870	1025	1.3	0.9	3.620	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.84	0.55	1.00	1.40	1.45			N/A	N/A
2 - Bellfarm Road	0.50	0.00	0.00	0.50	0.50			N/A	N/A
3 - A22 (South)	0.86	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.21	0.05	0.60	2.78	4.07			N/A	N/A
2 - Bellfarm Road	0.73	0.07	0.75	1.22	1.22			N/A	N/A
3 - A22 (South)	1.31	0.05	0.54	3.11	4.72			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.08	0.03	0.27	2.08	2.08			N/A	N/A
2 - Bellfarm Road	1.31	0.03	0.26	1.31	1.31			N/A	N/A
3 - A22 (South)	2.52	0.03	0.28	2.52	4.68			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.10	0.03	0.26	2.10	2.10			N/A	N/A
2 - Bellfarm Road	1.32	0.03	0.27	1.32	1.32			N/A	N/A
3 - A22 (South)	2.55	0.03	0.27	2.55	2.55			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.23	0.15	1.12	1.89	2.45			N/A	N/A
2 - Bellfarm Road	0.74	0.23	0.94	1.39	1.45			N/A	N/A
3 - A22 (South)	1.34	0.09	1.05	2.61	3.48			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.85	0.06	0.73	1.48	1.90			N/A	N/A
2 - Bellfarm Road	0.50	0.05	0.46	1.28	1.39			N/A	N/A
3 - A22 (South)	0.88	0.05	0.47	1.86	2.77			N/A	N/A

2039 with Downlands Farm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - Bellfarm Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	7.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1221	100.000
2 - Bellfarm Road		ONE HOUR	✓	488	100.000
3 - A22 (South)		ONE HOUR	✓	1373	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	314	907
	2 - Bellfarm Road	273	0	215
	3 - A22 (South)	1016	357	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Bellfarm Road	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.70	6.23	2.3	4.4	A	1120	1681
2 - Bellfarm Road	0.33	3.24	0.5	2.0	A	448	672
3 - A22 (South)	0.80	9.33	3.8	14.8	A	1260	1890

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	919	230	268	2011	0.457	916	967	0.0	0.8	3.277	A
2 - Bellfarm Road	367	92	680	1886	0.195	366	503	0.0	0.2	2.368	A
3 - A22 (South)	1034	258	205	1960	0.527	1029	842	0.0	1.1	3.855	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1098	274	320	1974	0.556	1096	1157	0.8	1.2	4.093	A
2 - Bellfarm Road	439	110	814	1786	0.246	438	602	0.2	0.3	2.672	A
3 - A22 (South)	1234	309	245	1933	0.638	1232	1007	1.1	1.7	5.113	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1344	336	391	1924	0.699	1340	1413	1.2	2.3	6.126	A
2 - Bellfarm Road	537	134	996	1650	0.326	537	736	0.3	0.5	3.231	A
3 - A22 (South)	1512	378	300	1896	0.797	1504	1232	1.7	3.7	8.985	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1344	336	393	1922	0.699	1344	1419	2.3	2.3	6.226	A
2 - Bellfarm Road	537	134	999	1648	0.326	537	739	0.5	0.5	3.240	A
3 - A22 (South)	1512	378	301	1896	0.797	1511	1235	3.7	3.8	9.330	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1098	274	323	1972	0.557	1102	1165	2.3	1.3	4.156	A
2 - Bellfarm Road	439	110	818	1782	0.246	439	606	0.5	0.3	2.683	A
3 - A22 (South)	1234	309	246	1933	0.639	1242	1012	3.8	1.8	5.273	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	919	230	269	2010	0.457	921	973	1.3	0.8	3.312	A
2 - Bellfarm Road	367	92	684	1883	0.195	368	506	0.3	0.2	2.376	A
3 - A22 (South)	1034	258	206	1960	0.527	1036	846	1.8	1.1	3.909	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.84	0.55	1.00	1.40	1.45			N/A	N/A
2 - Bellfarm Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A22 (South)	1.11	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.24	0.05	0.56	2.90	4.36			N/A	N/A
2 - Bellfarm Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A22 (South)	1.74	0.05	0.46	4.63	7.55			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.27	0.03	0.27	2.27	2.27			N/A	N/A
2 - Bellfarm Road	0.48	0.03	0.25	0.48	0.48			N/A	N/A
3 - A22 (South)	3.75	0.03	0.29	3.75	14.79			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.30	0.03	0.26	2.30	2.30			N/A	N/A
2 - Bellfarm Road	0.48	0.03	0.32	1.44	1.97			N/A	N/A
3 - A22 (South)	3.84	0.03	0.27	3.84	4.76			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.27	0.11	1.10	2.15	2.82			N/A	N/A
2 - Bellfarm Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
3 - A22 (South)	1.79	0.06	0.86	4.43	6.53			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.85	0.05	0.59	1.65	2.25			N/A	N/A
2 - Bellfarm Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A22 (South)	1.13	0.04	0.39	2.85	4.89			N/A	N/A

2039 with Downlands Farm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - Bellfarm Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	6.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1296	100.000
2 - Bellfarm Road		ONE HOUR	✓	809	100.000
3 - A22 (South)		ONE HOUR	✓	1195	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	286	1010
	2 - Bellfarm Road	461	0	348
	3 - A22 (South)	1061	134	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Bellfarm Road	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.68	5.37	2.1	4.1	A	1189	1784
2 - Bellfarm Road	0.57	5.35	1.3	1.4	A	742	1114
3 - A22 (South)	0.75	8.13	2.9	7.7	A	1097	1645

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	976	244	100	2130	0.458	972	1141	0.0	0.8	3.100	A
2 - Bellfarm Road	609	152	758	1828	0.333	607	315	0.0	0.5	2.944	A
3 - A22 (South)	900	225	346	1866	0.482	896	1019	0.0	0.9	3.698	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1165	291	120	2116	0.551	1164	1366	0.8	1.2	3.772	A
2 - Bellfarm Road	727	182	907	1716	0.424	726	377	0.5	0.7	3.632	A
3 - A22 (South)	1074	269	414	1820	0.590	1072	1219	0.9	1.4	4.800	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1427	357	147	2097	0.680	1423	1669	1.2	2.1	5.316	A
2 - Bellfarm Road	891	223	1109	1565	0.569	888	461	0.7	1.3	5.302	A
3 - A22 (South)	1316	329	506	1758	0.748	1310	1491	1.4	2.9	7.923	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1427	357	148	2097	0.681	1427	1676	2.1	2.1	5.372	A
2 - Bellfarm Road	891	223	1112	1563	0.570	891	462	1.3	1.3	5.353	A
3 - A22 (South)	1316	329	508	1758	0.749	1316	1495	2.9	2.9	8.131	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1165	291	121	2115	0.551	1169	1375	2.1	1.2	3.815	A
2 - Bellfarm Road	727	182	911	1713	0.424	730	379	1.3	0.7	3.666	A
3 - A22 (South)	1074	269	416	1819	0.591	1080	1225	2.9	1.5	4.908	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	976	244	101	2130	0.458	977	1148	1.2	0.9	3.127	A
2 - Bellfarm Road	609	152	762	1825	0.334	610	317	0.7	0.5	2.967	A
3 - A22 (South)	900	225	348	1865	0.482	902	1024	1.5	0.9	3.745	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.84	0.55	1.00	1.40	1.45			N/A	N/A
2 - Bellfarm Road	0.50	0.00	0.00	0.50	0.50			N/A	N/A
3 - A22 (South)	0.92	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.21	0.05	0.59	2.81	4.12			N/A	N/A
2 - Bellfarm Road	0.73	0.07	0.75	1.19	1.19			N/A	N/A
3 - A22 (South)	1.42	0.05	0.49	3.58	5.52			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.09	0.03	0.27	2.09	2.09			N/A	N/A
2 - Bellfarm Road	1.30	0.03	0.26	1.30	1.30			N/A	N/A
3 - A22 (South)	2.87	0.03	0.28	2.87	7.74			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.11	0.03	0.26	2.11	2.11			N/A	N/A
2 - Bellfarm Road	1.31	0.03	0.27	1.31	1.31			N/A	N/A
3 - A22 (South)	2.92	0.03	0.27	2.92	2.92			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.24	0.15	1.12	1.91	2.49			N/A	N/A
2 - Bellfarm Road	0.74	0.23	0.94	1.39	1.45			N/A	N/A
3 - A22 (South)	1.46	0.07	1.00	3.09	4.33			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.85	0.06	0.72	1.50	1.91			N/A	N/A
2 - Bellfarm Road	0.50	0.05	0.46	1.28	1.39			N/A	N/A
3 - A22 (South)	0.94	0.04	0.44	2.16	3.40			N/A	N/A

2039 with All Developments, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - Bellfarm Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	7.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1221	100.000
2 - Bellfarm Road		ONE HOUR	✓	531	100.000
3 - A22 (South)		ONE HOUR	✓	1350	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	322	899
	2 - Bellfarm Road	299	0	232
	3 - A22 (South)	993	357	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Bellfarm Road	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.70	6.23	2.3	4.4	A	1120	1681
2 - Bellfarm Road	0.35	3.36	0.5	2.5	A	487	731
3 - A22 (South)	0.79	9.19	3.7	13.9	A	1239	1858

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	919	230	268	2011	0.457	916	969	0.0	0.8	3.277	A
2 - Bellfarm Road	400	100	674	1890	0.212	399	509	0.0	0.3	2.413	A
3 - A22 (South)	1016	254	225	1947	0.522	1012	849	0.0	1.1	3.832	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1098	274	320	1974	0.556	1096	1159	0.8	1.2	4.093	A
2 - Bellfarm Road	477	119	807	1791	0.267	477	609	0.3	0.4	2.739	A
3 - A22 (South)	1214	303	269	1918	0.633	1211	1015	1.1	1.7	5.080	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1344	336	391	1924	0.699	1340	1416	1.2	2.3	6.126	A
2 - Bellfarm Road	585	146	987	1657	0.353	584	744	0.4	0.5	3.354	A
3 - A22 (South)	1486	372	329	1877	0.792	1479	1242	1.7	3.6	8.861	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1344	336	393	1922	0.699	1344	1422	2.3	2.3	6.226	A
2 - Bellfarm Road	585	146	990	1654	0.353	585	747	0.5	0.5	3.364	A
3 - A22 (South)	1486	372	329	1877	0.792	1486	1245	3.6	3.7	9.185	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1098	274	323	1972	0.557	1102	1168	2.3	1.3	4.157	A
2 - Bellfarm Road	477	119	811	1788	0.267	478	614	0.5	0.4	2.751	A
3 - A22 (South)	1214	303	269	1917	0.633	1221	1020	3.7	1.8	5.232	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	919	230	269	2010	0.457	921	975	1.3	0.8	3.312	A
2 - Bellfarm Road	400	100	678	1887	0.212	400	512	0.4	0.3	2.420	A
3 - A22 (South)	1016	254	225	1947	0.522	1019	853	1.8	1.1	3.892	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.84	0.55	1.00	1.40	1.45			N/A	N/A
2 - Bellfarm Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3 - A22 (South)	1.08	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.24	0.05	0.56	2.90	4.36			N/A	N/A
2 - Bellfarm Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A22 (South)	1.70	0.05	0.46	4.51	7.29			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.27	0.03	0.27	2.27	2.27			N/A	N/A
2 - Bellfarm Road	0.54	0.03	0.25	0.54	0.54			N/A	N/A
3 - A22 (South)	3.63	0.03	0.29	3.63	13.88			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.30	0.03	0.26	2.30	2.30			N/A	N/A
2 - Bellfarm Road	0.54	0.03	0.31	1.46	2.52			N/A	N/A
3 - A22 (South)	3.72	0.03	0.27	3.72	4.30			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.27	0.11	1.10	2.15	2.82			N/A	N/A
2 - Bellfarm Road	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - A22 (South)	1.75	0.06	0.88	4.25	6.22			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.85	0.05	0.59	1.65	2.25			N/A	N/A
2 - Bellfarm Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3 - A22 (South)	1.10	0.04	0.40	2.77	4.70			N/A	N/A

2039 with All Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - Bellfarm Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	6.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1296	100.000
2 - Bellfarm Road		ONE HOUR	✓	813	100.000
3 - A22 (South)		ONE HOUR	✓	1187	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	292	1004
	2 - Bellfarm Road	486	0	327
	3 - A22 (South)	1045	142	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Bellfarm Road	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Bellfarm Road	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.68	5.42	2.1	4.2	A	1189	1784
2 - Bellfarm Road	0.57	5.35	1.3	1.4	A	746	1119
3 - A22 (South)	0.75	8.31	3.0	8.2	A	1089	1634

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	976	244	106	2126	0.459	972	1148	0.0	0.8	3.112	A
2 - Bellfarm Road	612	153	753	1831	0.334	610	326	0.0	0.5	2.943	A
3 - A22 (South)	894	223	365	1853	0.482	890	999	0.0	0.9	3.724	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1165	291	127	2111	0.552	1164	1374	0.8	1.2	3.793	A
2 - Bellfarm Road	731	183	901	1720	0.425	730	390	0.5	0.7	3.631	A
3 - A22 (South)	1067	267	436	1805	0.591	1065	1195	0.9	1.4	4.849	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1427	357	156	2091	0.682	1423	1679	1.2	2.1	5.364	A
2 - Bellfarm Road	895	224	1103	1570	0.570	893	476	0.7	1.3	5.297	A
3 - A22 (South)	1307	327	534	1740	0.751	1301	1462	1.4	2.9	8.089	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1427	357	156	2090	0.683	1427	1685	2.1	2.1	5.423	A
2 - Bellfarm Road	895	224	1105	1568	0.571	895	478	1.3	1.3	5.349	A
3 - A22 (South)	1307	327	535	1739	0.751	1307	1465	2.9	3.0	8.312	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1165	291	128	2110	0.552	1169	1383	2.1	1.2	3.839	A
2 - Bellfarm Road	731	183	905	1718	0.426	733	392	1.3	0.7	3.664	A
3 - A22 (South)	1067	267	438	1804	0.592	1073	1200	3.0	1.5	4.966	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	976	244	107	2125	0.459	977	1155	1.2	0.9	3.141	A
2 - Bellfarm Road	612	153	757	1828	0.335	613	327	0.7	0.5	2.966	A
3 - A22 (South)	894	223	366	1852	0.483	896	1004	1.5	0.9	3.771	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.84	0.55	1.00	1.40	1.45			N/A	N/A
2 - Bellfarm Road	0.50	0.00	0.00	0.50	0.50			N/A	N/A
3 - A22 (South)	0.92	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.22	0.05	0.59	2.83	4.17			N/A	N/A
2 - Bellfarm Road	0.73	0.07	0.75	1.23	1.23			N/A	N/A
3 - A22 (South)	1.43	0.05	0.49	3.60	5.56			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.11	0.03	0.27	2.11	2.11			N/A	N/A
2 - Bellfarm Road	1.31	0.03	0.26	1.31	1.31			N/A	N/A
3 - A22 (South)	2.91	0.03	0.28	2.91	8.23			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.13	0.03	0.26	2.13	2.13			N/A	N/A
2 - Bellfarm Road	1.32	0.03	0.27	1.32	1.32			N/A	N/A
3 - A22 (South)	2.97	0.03	0.27	2.97	2.97			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.24	0.14	1.13	1.93	2.53			N/A	N/A
2 - Bellfarm Road	0.75	0.24	0.94	1.39	1.45			N/A	N/A
3 - A22 (South)	1.47	0.07	0.99	3.15	4.42			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.85	0.06	0.72	1.52	1.93			N/A	N/A
2 - Bellfarm Road	0.51	0.05	0.46	1.28	1.39			N/A	N/A
3 - A22 (South)	0.94	0.04	0.43	2.19	3.47			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: M06a-Ridgewood Site Access Roundabout Jacobs 22-02-18.j9
Path: C:\Users\JoeEarp\OneDrive - Motion\TP Projects\gluckf 2001061\Analysis\Junction Modelling
Report generation date: 18/02/2022 11:36:53

»2018 Baseline, AM
»2018 Baseline, PM
»2039 Baseline, AM
»2039 Baseline, PM
»2039 with Downlands Farm, AM
»2039 with Downlands Farm, PM
»2039 with All Developments, AM
»2039 with All Developments, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2018 Baseline							
1 - A22 (North)	D1	0.8	2.71	0.44	D2	1.3	3.58	0.57
2 - Ridgewood Farm Site Access		0.0	0.00	0.00		0.0	0.00	0.00
3 - A22 (South)		1.5	3.67	0.61		0.6	2.39	0.39
	2039 Baseline							
1 - A22 (North)	D3	1.1	3.43	0.53	D4	2.1	5.09	0.68
2 - Ridgewood Farm Site Access		0.9	6.38	0.49		0.8	6.77	0.45
3 - A22 (South)		1.7	4.38	0.63		1.2	3.36	0.54
	2039 with Downlands Farm							
1 - A22 (North)	D5	1.2	3.52	0.55	D6	2.1	5.07	0.68
2 - Ridgewood Farm Site Access		1.0	6.58	0.50		0.8	6.76	0.45
3 - A22 (South)		1.6	4.24	0.62		1.3	3.51	0.56
	2039 with All Developments							
1 - A22 (North)	D7	1.2	3.56	0.55	D8	2.0	4.86	0.66
2 - Ridgewood Farm Site Access		1.0	6.68	0.50		0.8	6.52	0.44
3 - A22 (South)		1.6	4.13	0.61		1.2	3.48	0.55

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	05/01/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\joeearp
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A22 (North)	
2	Ridgewood Farm Site Access	
3	A22 (South)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A22 (North)	7.30	7.30	0.0	21.5	52.0	12.0	
2 - Ridgewood Farm Site Access	3.30	7.40	14.0	25.5	52.0	13.5	
3 - A22 (South)	7.20	8.40	4.9	27.0	52.0	21.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A22 (North)	0.741	2358
2 - Ridgewood Farm Site Access	0.628	1752
3 - A22 (South)	0.759	2490

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	936	100.000
2 - Ridgewood Farm Site Access		ONE HOUR	✓	0	100.000
3 - A22 (South)		ONE HOUR	✓	1372	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	936
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	1372	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.44	2.71	0.8	1.9	A	859	1288
2 - Ridgewood Farm Site Access	0.00	0.00	0.0	~1	A	0	0
3 - A22 (South)	0.61	3.67	1.5	2.7	A	1259	1888

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	705	176	0	2358	0.299	703	1030	0.0	0.4	2.174	A
2 - Ridgewood Farm Site Access	0	0	703	1311	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	1033	258	0	2490	0.415	1030	703	0.0	0.7	2.462	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	841	210	0	2358	0.357	841	1232	0.4	0.6	2.374	A
2 - Ridgewood Farm Site Access	0	0	841	1224	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	1233	308	0	2490	0.495	1232	841	0.7	1.0	2.859	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1031	258	0	2358	0.437	1030	1508	0.6	0.8	2.710	A
2 - Ridgewood Farm Site Access	0	0	1030	1106	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	1511	378	0	2490	0.607	1508	1030	1.0	1.5	3.659	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1031	258	0	2358	0.437	1031	1511	0.8	0.8	2.712	A
2 - Ridgewood Farm Site Access	0	0	1031	1105	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	1511	378	0	2490	0.607	1511	1031	1.5	1.5	3.674	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	841	210	0	2358	0.357	842	1236	0.8	0.6	2.378	A
2 - Ridgewood Farm Site Access	0	0	842	1223	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	1233	308	0	2490	0.495	1236	842	1.5	1.0	2.873	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	705	176	0	2358	0.299	705	1034	0.6	0.4	2.178	A
2 - Ridgewood Farm Site Access	0	0	705	1309	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	1033	258	0	2490	0.415	1034	705	1.0	0.7	2.475	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.42	0.00	0.00	0.42	0.42			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.71	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.55	0.07	0.73	1.35	1.42			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.98	0.06	0.72	1.87	2.65			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.77	0.03	0.25	0.77	0.77			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	1.53	0.03	0.26	1.53	1.53			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.77	0.03	0.27	0.77	1.94			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	1.53	0.03	0.26	1.53	1.53			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.56	0.55	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.99	0.52	1.02	1.11	1.11			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.43	0.00	0.00	0.43	0.43			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.71	0.11	0.85	1.38	1.45			N/A	N/A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1228	100.000
2 - Ridgewood Farm Site Access		ONE HOUR	✓	0	100.000
3 - A22 (South)		ONE HOUR	✓	892	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	1228
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	892	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.57	3.58	1.3	1.9	A	1127	1690
2 - Ridgewood Farm Site Access	0.00	0.00	0.0	~1	A	0	0
3 - A22 (South)	0.39	2.39	0.6	2.7	A	819	1228

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	925	231	0	2358	0.392	922	670	0.0	0.6	2.503	A
2 - Ridgewood Farm Site Access	0	0	922	1173	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	672	168	0	2490	0.270	670	922	0.0	0.4	1.976	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1104	276	0	2358	0.468	1103	801	0.6	0.9	2.868	A
2 - Ridgewood Farm Site Access	0	0	1103	1059	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	802	200	0	2490	0.322	801	1103	0.4	0.5	2.131	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1352	338	0	2358	0.573	1350	981	0.9	1.3	3.568	A
2 - Ridgewood Farm Site Access	0	0	1350	904	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	982	246	0	2490	0.394	981	1350	0.5	0.6	2.384	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1352	338	0	2358	0.573	1352	982	1.3	1.3	3.579	A
2 - Ridgewood Farm Site Access	0	0	1352	903	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	982	246	0	2490	0.394	982	1352	0.6	0.6	2.386	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1104	276	0	2358	0.468	1106	803	1.3	0.9	2.879	A
2 - Ridgewood Farm Site Access	0	0	1106	1058	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	802	200	0	2490	0.322	803	1106	0.6	0.5	2.135	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	925	231	0	2358	0.392	925	672	0.9	0.6	2.514	A
2 - Ridgewood Farm Site Access	0	0	925	1171	0.000	0	0	0.0	0.0	0.000	A
3 - A22 (South)	672	168	0	2490	0.270	672	925	0.5	0.4	1.980	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.64	0.55	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.37	0.00	0.00	0.37	0.37			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.88	0.07	0.78	1.50	1.90			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.47	0.00	0.00	0.47	0.47			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.33	0.03	0.26	1.33	1.33			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.65	0.03	0.25	0.65	0.65			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.34	0.03	0.26	1.34	1.34			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.65	0.03	0.28	0.95	2.67			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.89	0.54	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.48	0.00	0.00	0.48	0.48			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.65	0.11	0.86	1.37	1.44			N/A	N/A
2 - Ridgewood Farm Site Access	0.00	0.00	0.00	0.00	0.00			N/A	N/A
3 - A22 (South)	0.37	0.00	0.00	0.37	0.37			N/A	N/A

2039 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1096	100.000
2 - Ridgewood Farm Site Access		ONE HOUR	✓	490	100.000
3 - A22 (South)		ONE HOUR	✓	1296	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	158	938
	2 - Ridgewood Farm Site Access	289	0	201
	3 - A22 (South)	1172	124	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.53	3.43	1.1	1.5	A	1006	1509
2 - Ridgewood Farm Site Access	0.49	6.38	0.9	2.8	A	450	674
3 - A22 (South)	0.63	4.38	1.7	2.9	A	1189	1784

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	825	206	93	2289	0.361	823	1096	0.0	0.6	2.453	A
2 - Ridgewood Farm Site Access	369	92	704	1310	0.282	367	212	0.0	0.4	3.812	A
3 - A22 (South)	976	244	217	2326	0.420	973	855	0.0	0.7	2.655	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	985	246	111	2275	0.433	984	1312	0.6	0.8	2.788	A
2 - Ridgewood Farm Site Access	440	110	843	1223	0.360	440	253	0.4	0.6	4.592	A
3 - A22 (South)	1165	291	259	2293	0.508	1164	1023	0.7	1.0	3.185	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1207	302	136	2257	0.535	1205	1605	0.8	1.1	3.419	A
2 - Ridgewood Farm Site Access	540	135	1031	1104	0.489	538	310	0.6	0.9	6.339	A
3 - A22 (South)	1427	357	317	2249	0.634	1424	1252	1.0	1.7	4.347	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1207	302	137	2256	0.535	1207	1609	1.1	1.1	3.428	A
2 - Ridgewood Farm Site Access	540	135	1033	1104	0.489	539	310	0.9	0.9	6.381	A
3 - A22 (South)	1427	357	318	2249	0.635	1427	1254	1.7	1.7	4.380	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	985	246	112	2275	0.433	987	1317	1.1	0.8	2.797	A
2 - Ridgewood Farm Site Access	440	110	845	1222	0.361	442	254	0.9	0.6	4.625	A
3 - A22 (South)	1165	291	261	2292	0.508	1168	1026	1.7	1.0	3.211	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	825	206	93	2288	0.361	826	1101	0.8	0.6	2.464	A
2 - Ridgewood Farm Site Access	369	92	707	1308	0.282	370	213	0.6	0.4	3.836	A
3 - A22 (South)	976	244	218	2325	0.420	977	858	1.0	0.7	2.675	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.56	0.55	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3 - A22 (South)	0.72	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.76	0.08	0.79	1.30	1.30			N/A	N/A
2 - Ridgewood Farm Site Access	0.56	0.07	0.73	1.35	1.42			N/A	N/A
3 - A22 (South)	1.03	0.06	0.67	2.06	2.95			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.14	0.03	0.26	1.14	1.14			N/A	N/A
2 - Ridgewood Farm Site Access	0.94	0.03	0.26	0.94	0.94			N/A	N/A
3 - A22 (South)	1.71	0.03	0.26	1.71	1.71			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.14	0.03	0.26	1.14	1.14			N/A	N/A
2 - Ridgewood Farm Site Access	0.95	0.03	0.28	0.95	2.80			N/A	N/A
3 - A22 (South)	1.72	0.03	0.26	1.72	1.72			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.77	0.55	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.57	0.10	0.82	1.36	1.43			N/A	N/A
3 - A22 (South)	1.04	0.32	1.04	1.31	1.67			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.57	0.09	0.80	1.36	1.43			N/A	N/A
2 - Ridgewood Farm Site Access	0.39	0.03	0.29	0.76	1.13			N/A	N/A
3 - A22 (South)	0.73	0.08	0.78	1.42	1.50			N/A	N/A

2039 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1362	100.000
2 - Ridgewood Farm Site Access		ONE HOUR	✓	392	100.000
3 - A22 (South)		ONE HOUR	✓	1129	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	221	1141
	2 - Ridgewood Farm Site Access	211	0	181
	3 - A22 (South)	944	185	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.68	5.09	2.1	4.2	A	1250	1875
2 - Ridgewood Farm Site Access	0.45	6.77	0.8	3.3	A	360	540
3 - A22 (South)	0.54	3.36	1.2	1.5	A	1036	1554

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1025	256	139	2255	0.455	1022	867	0.0	0.8	2.914	A
2 - Ridgewood Farm Site Access	295	74	856	1214	0.243	294	305	0.0	0.3	3.904	A
3 - A22 (South)	850	212	158	2370	0.359	848	992	0.0	0.6	2.362	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1224	306	166	2235	0.548	1223	1037	0.8	1.2	3.554	A
2 - Ridgewood Farm Site Access	352	88	1024	1109	0.318	352	365	0.3	0.5	4.753	A
3 - A22 (South)	1015	254	189	2346	0.433	1014	1187	0.6	0.8	2.701	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1500	375	203	2207	0.679	1496	1270	1.2	2.1	5.039	A
2 - Ridgewood Farm Site Access	432	108	1253	965	0.447	430	446	0.5	0.8	6.716	A
3 - A22 (South)	1243	311	232	2314	0.537	1241	1452	0.8	1.2	3.351	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1500	375	204	2207	0.680	1500	1272	2.1	2.1	5.088	A
2 - Ridgewood Farm Site Access	432	108	1256	963	0.448	432	447	0.8	0.8	6.771	A
3 - A22 (South)	1243	311	232	2314	0.537	1243	1455	1.2	1.2	3.361	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1224	306	167	2234	0.548	1228	1040	2.1	1.2	3.588	A
2 - Ridgewood Farm Site Access	352	88	1029	1106	0.319	354	366	0.8	0.5	4.792	A
3 - A22 (South)	1015	254	190	2346	0.433	1017	1192	1.2	0.8	2.711	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1025	256	139	2254	0.455	1027	871	1.2	0.8	2.935	A
2 - Ridgewood Farm Site Access	295	74	860	1212	0.244	296	306	0.5	0.3	3.932	A
3 - A22 (South)	850	212	159	2369	0.359	851	997	0.8	0.6	2.373	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.83	0.55	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A22 (South)	0.56	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.20	0.05	0.55	2.80	4.16			N/A	N/A
2 - Ridgewood Farm Site Access	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3 - A22 (South)	0.76	0.07	0.78	1.34	1.34			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.08	0.03	0.27	2.08	2.08			N/A	N/A
2 - Ridgewood Farm Site Access	0.80	0.03	0.26	0.80	0.80			N/A	N/A
3 - A22 (South)	1.15	0.03	0.26	1.15	1.15			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.10	0.03	0.26	2.10	2.10			N/A	N/A
2 - Ridgewood Farm Site Access	0.81	0.03	0.29	1.09	3.34			N/A	N/A
3 - A22 (South)	1.16	0.03	0.26	1.16	1.16			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.22	0.16	1.13	1.86	2.34			N/A	N/A
2 - Ridgewood Farm Site Access	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3 - A22 (South)	0.77	0.55	1.00	1.40	1.45			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.84	0.06	0.74	1.43	1.86			N/A	N/A
2 - Ridgewood Farm Site Access	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A22 (South)	0.56	0.08	0.79	1.36	1.43			N/A	N/A

2039 with Downlands Farm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1122	100.000
2 - Ridgewood Farm Site Access		ONE HOUR	✓	490	100.000
3 - A22 (South)		ONE HOUR	✓	1270	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	159	963
	2 - Ridgewood Farm Site Access	290	0	200
	3 - A22 (South)	1147	123	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.55	3.52	1.2	1.5	A	1030	1544
2 - Ridgewood Farm Site Access	0.50	6.58	1.0	2.8	A	450	674
3 - A22 (South)	0.62	4.24	1.6	2.7	A	1165	1748

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	845	211	92	2289	0.369	842	1078	0.0	0.6	2.483	A
2 - Ridgewood Farm Site Access	369	92	723	1298	0.284	367	212	0.0	0.4	3.861	A
3 - A22 (South)	956	239	217	2325	0.411	953	873	0.0	0.7	2.618	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1009	252	110	2276	0.443	1008	1290	0.6	0.8	2.838	A
2 - Ridgewood Farm Site Access	440	110	865	1209	0.364	440	253	0.4	0.6	4.676	A
3 - A22 (South)	1142	285	260	2293	0.498	1141	1045	0.7	1.0	3.122	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1235	309	135	2257	0.547	1234	1579	0.8	1.2	3.510	A
2 - Ridgewood Farm Site Access	540	135	1059	1087	0.496	538	310	0.6	1.0	6.534	A
3 - A22 (South)	1398	350	318	2249	0.622	1396	1278	1.0	1.6	4.208	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1235	309	135	2257	0.547	1235	1582	1.2	1.2	3.521	A
2 - Ridgewood Farm Site Access	540	135	1060	1086	0.497	539	310	1.0	1.0	6.583	A
3 - A22 (South)	1398	350	319	2248	0.622	1398	1280	1.6	1.6	4.237	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1009	252	111	2276	0.443	1010	1295	1.2	0.8	2.850	A
2 - Ridgewood Farm Site Access	440	110	867	1208	0.365	442	254	1.0	0.6	4.711	A
3 - A22 (South)	1142	285	262	2292	0.498	1144	1048	1.6	1.0	3.143	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	845	211	93	2289	0.369	846	1083	0.8	0.6	2.497	A
2 - Ridgewood Farm Site Access	369	92	726	1296	0.285	370	213	0.6	0.4	3.886	A
3 - A22 (South)	956	239	219	2324	0.411	957	877	1.0	0.7	2.637	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.58	0.55	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3 - A22 (South)	0.69	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.79	0.07	0.79	1.50	1.54			N/A	N/A
2 - Ridgewood Farm Site Access	0.57	0.07	0.75	1.35	1.43			N/A	N/A
3 - A22 (South)	0.99	0.06	0.70	1.91	2.73			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.20	0.03	0.26	1.20	1.20			N/A	N/A
2 - Ridgewood Farm Site Access	0.97	0.03	0.26	0.97	0.97			N/A	N/A
3 - A22 (South)	1.62	0.03	0.26	1.62	1.62			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.20	0.03	0.26	1.20	1.20			N/A	N/A
2 - Ridgewood Farm Site Access	0.98	0.03	0.28	0.98	2.81			N/A	N/A
3 - A22 (South)	1.64	0.03	0.26	1.64	1.64			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.80	0.54	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.58	0.10	0.83	1.37	1.43			N/A	N/A
3 - A22 (South)	1.00	0.41	1.02	1.50	1.50			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.59	0.09	0.82	1.36	1.43			N/A	N/A
2 - Ridgewood Farm Site Access	0.40	0.03	0.30	0.90	1.20			N/A	N/A
3 - A22 (South)	0.70	0.08	0.78	1.39	1.46			N/A	N/A

2039 with Downlands Farm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1361	100.000
2 - Ridgewood Farm Site Access		ONE HOUR	✓	392	100.000
3 - A22 (South)		ONE HOUR	✓	1175	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	221	1140
	2 - Ridgewood Farm Site Access	206	0	186
	3 - A22 (South)	991	184	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.68	5.07	2.1	4.1	A	1249	1873
2 - Ridgewood Farm Site Access	0.45	6.76	0.8	3.3	A	360	540
3 - A22 (South)	0.56	3.51	1.3	1.7	A	1078	1617

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1025	256	138	2255	0.454	1021	898	0.0	0.8	2.910	A
2 - Ridgewood Farm Site Access	295	74	855	1215	0.243	294	304	0.0	0.3	3.902	A
3 - A22 (South)	885	221	154	2373	0.373	882	995	0.0	0.6	2.410	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1224	306	165	2235	0.547	1222	1075	0.8	1.2	3.549	A
2 - Ridgewood Farm Site Access	352	88	1024	1109	0.318	352	364	0.3	0.5	4.749	A
3 - A22 (South)	1056	264	185	2350	0.450	1055	1191	0.6	0.8	2.780	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1498	375	202	2208	0.679	1495	1316	1.2	2.1	5.025	A
2 - Ridgewood Farm Site Access	432	108	1252	966	0.447	430	445	0.5	0.8	6.708	A
3 - A22 (South)	1294	323	226	2319	0.558	1292	1456	0.8	1.3	3.500	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1498	375	203	2208	0.679	1498	1318	2.1	2.1	5.074	A
2 - Ridgewood Farm Site Access	432	108	1255	964	0.448	432	446	0.8	0.8	6.762	A
3 - A22 (South)	1294	323	227	2318	0.558	1294	1460	1.3	1.3	3.513	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1224	306	166	2235	0.547	1227	1078	2.1	1.2	3.583	A
2 - Ridgewood Farm Site Access	352	88	1028	1107	0.318	354	365	0.8	0.5	4.788	A
3 - A22 (South)	1056	264	186	2349	0.450	1058	1196	1.3	0.8	2.793	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1025	256	139	2255	0.454	1026	902	1.2	0.8	2.935	A
2 - Ridgewood Farm Site Access	295	74	860	1212	0.243	296	305	0.5	0.3	3.929	A
3 - A22 (South)	885	221	155	2372	0.373	885	1000	0.8	0.6	2.422	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.83	0.55	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A22 (South)	0.59	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.20	0.05	0.55	2.79	4.13			N/A	N/A
2 - Ridgewood Farm Site Access	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3 - A22 (South)	0.81	0.07	0.77	1.20	1.68			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.08	0.03	0.26	2.08	2.08			N/A	N/A
2 - Ridgewood Farm Site Access	0.80	0.03	0.26	0.80	0.80			N/A	N/A
3 - A22 (South)	1.25	0.03	0.26	1.25	1.25			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	2.09	0.03	0.26	2.09	2.09			N/A	N/A
2 - Ridgewood Farm Site Access	0.80	0.03	0.29	1.09	3.34			N/A	N/A
3 - A22 (South)	1.26	0.03	0.26	1.26	1.26			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.22	0.16	1.12	1.85	2.32			N/A	N/A
2 - Ridgewood Farm Site Access	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3 - A22 (South)	0.82	0.54	1.00	1.40	1.45			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.84	0.06	0.74	1.42	1.85			N/A	N/A
2 - Ridgewood Farm Site Access	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A22 (South)	0.60	0.09	0.82	1.36	1.43			N/A	N/A

2039 with All Developments, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1131	100.000
2 - Ridgewood Farm Site Access		ONE HOUR	✓	490	100.000
3 - A22 (South)		ONE HOUR	✓	1250	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	157	974
	2 - Ridgewood Farm Site Access	291	0	199
	3 - A22 (South)	1127	123	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.55	3.56	1.2	1.6	A	1038	1557
2 - Ridgewood Farm Site Access	0.50	6.68	1.0	2.8	A	450	674
3 - A22 (South)	0.61	4.13	1.6	2.5	A	1147	1721

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	851	213	92	2289	0.372	849	1064	0.0	0.6	2.495	A
2 - Ridgewood Farm Site Access	369	92	731	1293	0.285	367	210	0.0	0.4	3.883	A
3 - A22 (South)	941	235	218	2325	0.405	938	880	0.0	0.7	2.593	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1017	254	110	2276	0.447	1016	1273	0.6	0.8	2.856	A
2 - Ridgewood Farm Site Access	440	110	875	1203	0.366	440	251	0.4	0.6	4.714	A
3 - A22 (South)	1124	281	261	2292	0.490	1123	1053	0.7	1.0	3.076	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1245	311	135	2257	0.552	1244	1558	0.8	1.2	3.544	A
2 - Ridgewood Farm Site Access	540	135	1071	1080	0.500	538	308	0.6	1.0	6.625	A
3 - A22 (South)	1376	344	319	2248	0.612	1374	1289	1.0	1.6	4.108	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1245	311	135	2257	0.552	1245	1561	1.2	1.2	3.556	A
2 - Ridgewood Farm Site Access	540	135	1072	1079	0.500	539	308	1.0	1.0	6.675	A
3 - A22 (South)	1376	344	320	2247	0.613	1376	1291	1.6	1.6	4.134	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1017	254	111	2276	0.447	1018	1278	1.2	0.8	2.866	A
2 - Ridgewood Farm Site Access	440	110	877	1201	0.367	442	252	1.0	0.6	4.750	A
3 - A22 (South)	1124	281	263	2291	0.491	1126	1057	1.6	1.0	3.096	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	851	213	93	2289	0.372	852	1069	0.8	0.6	2.508	A
2 - Ridgewood Farm Site Access	369	92	734	1291	0.286	370	211	0.6	0.4	3.908	A
3 - A22 (South)	941	235	220	2324	0.405	942	884	1.0	0.7	2.609	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.59	0.55	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - A22 (South)	0.68	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.80	0.07	0.79	1.08	1.60			N/A	N/A
2 - Ridgewood Farm Site Access	0.57	0.08	0.75	1.35	1.43			N/A	N/A
3 - A22 (South)	0.96	0.06	0.72	1.82	2.54			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.22	0.03	0.26	1.22	1.22			N/A	N/A
2 - Ridgewood Farm Site Access	0.98	0.03	0.26	0.98	0.98			N/A	N/A
3 - A22 (South)	1.56	0.03	0.26	1.56	1.56			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.23	0.03	0.26	1.23	1.23			N/A	N/A
2 - Ridgewood Farm Site Access	0.99	0.03	0.28	0.99	2.81			N/A	N/A
3 - A22 (South)	1.57	0.03	0.26	1.57	1.57			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.81	0.54	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.58	0.10	0.83	1.37	1.43			N/A	N/A
3 - A22 (South)	0.97	0.50	1.01	1.26	1.26			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.59	0.10	0.82	1.37	1.43			N/A	N/A
2 - Ridgewood Farm Site Access	0.40	0.03	0.31	0.95	1.23			N/A	N/A
3 - A22 (South)	0.68	0.08	0.79	1.38	1.45			N/A	N/A

2039 with All Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A22 (North)		ONE HOUR	✓	1333	100.000
2 - Ridgewood Farm Site Access		ONE HOUR	✓	391	100.000
3 - A22 (South)		ONE HOUR	✓	1168	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	220	1113
	2 - Ridgewood Farm Site Access	205	0	186
	3 - A22 (South)	984	184	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A22 (North)	2 - Ridgewood Farm Site Access	3 - A22 (South)
From	1 - A22 (North)	0	0	0
	2 - Ridgewood Farm Site Access	0	0	0
	3 - A22 (South)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A22 (North)	0.66	4.86	2.0	3.8	A	1223	1835
2 - Ridgewood Farm Site Access	0.44	6.52	0.8	3.3	A	359	538
3 - A22 (South)	0.55	3.48	1.2	1.6	A	1072	1608

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1004	251	138	2255	0.445	1000	893	0.0	0.8	2.861	A
2 - Ridgewood Farm Site Access	294	74	835	1228	0.240	293	303	0.0	0.3	3.847	A
3 - A22 (South)	879	220	154	2374	0.370	877	975	0.0	0.6	2.406	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1198	300	165	2235	0.536	1197	1068	0.8	1.1	3.463	A
2 - Ridgewood Farm Site Access	352	88	999	1125	0.313	351	363	0.3	0.5	4.651	A
3 - A22 (South)	1050	263	184	2351	0.447	1049	1166	0.6	0.8	2.765	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1468	367	202	2208	0.665	1464	1307	1.1	2.0	4.821	A
2 - Ridgewood Farm Site Access	430	108	1223	984	0.437	429	444	0.5	0.8	6.472	A
3 - A22 (South)	1286	321	225	2319	0.554	1284	1427	0.8	1.2	3.472	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1468	367	203	2208	0.665	1468	1309	2.0	2.0	4.865	A
2 - Ridgewood Farm Site Access	430	108	1225	983	0.438	430	445	0.8	0.8	6.520	A
3 - A22 (South)	1286	321	226	2319	0.555	1286	1430	1.2	1.2	3.484	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1198	300	166	2235	0.536	1202	1071	2.0	1.2	3.496	A
2 - Ridgewood Farm Site Access	352	88	1003	1122	0.313	353	364	0.8	0.5	4.686	A
3 - A22 (South)	1050	263	185	2350	0.447	1052	1171	1.2	0.8	2.776	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A22 (North)	1004	251	139	2255	0.445	1005	896	1.2	0.8	2.882	A
2 - Ridgewood Farm Site Access	294	74	839	1225	0.240	295	305	0.5	0.3	3.873	A
3 - A22 (South)	879	220	155	2373	0.371	880	979	0.8	0.6	2.412	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.80	0.55	1.00	1.40	1.45			N/A	N/A
2 - Ridgewood Farm Site Access	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A22 (South)	0.59	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.15	0.05	0.60	2.60	3.78			N/A	N/A
2 - Ridgewood Farm Site Access	0.45	0.00	0.00	0.45	0.45			N/A	N/A
3 - A22 (South)	0.80	0.07	0.78	1.13	1.64			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.95	0.03	0.26	1.95	1.95			N/A	N/A
2 - Ridgewood Farm Site Access	0.77	0.03	0.26	0.77	0.77			N/A	N/A
3 - A22 (South)	1.23	0.03	0.26	1.23	1.23			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.97	0.03	0.26	1.97	1.97			N/A	N/A
2 - Ridgewood Farm Site Access	0.77	0.03	0.29	1.13	3.27			N/A	N/A
3 - A22 (South)	1.24	0.03	0.26	1.24	1.24			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	1.17	0.19	1.10	1.73	1.96			N/A	N/A
2 - Ridgewood Farm Site Access	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3 - A22 (South)	0.81	0.54	1.00	1.40	1.45			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A22 (North)	0.81	0.07	0.76	1.21	1.69			N/A	N/A
2 - Ridgewood Farm Site Access	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - A22 (South)	0.59	0.09	0.82	1.36	1.43			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: M07a-Little Horsted Roundabout Jacobs 22-05-26.j9
Path: C:\Users\JoeEarp\Motion\StaffSite - gluckf 2001061\Analysis\Junction Modelling
Report generation date: 26/05/2022 14:42:31

»2018 Baseline, AM
»2018 Baseline, PM
»2039 Baseline, AM
»2039 Baseline, PM
»2039 with Downlands Farm, AM
»2039 with Downlands Farm, PM
»2039 with All Developments, AM
»2039 with All Developments, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2018 Baseline							
1 - Lewes Road	D1	0.8	5.66	0.43	D2	0.3	5.18	0.24
2 - A22 (South)		2.0	6.01	0.66		0.8	3.32	0.44
3 - A26		0.7	4.79	0.43		0.7	3.88	0.40
4 - A22 (North)		0.9	3.31	0.49		2.2	5.87	0.69
	2039 Baseline							
1 - Lewes Road	D3	1.6	9.83	0.61	D4	0.4	5.84	0.31
2 - A22 (South)		1.7	5.89	0.63		1.3	4.40	0.57
3 - A26		0.9	5.00	0.47		0.8	4.84	0.46
4 - A22 (North)		1.6	4.49	0.61		2.3	6.20	0.70
	2039 with Downlands Farm							
1 - Lewes Road	D5	1.7	10.74	0.64	D6	0.5	6.02	0.34
2 - A22 (South)		1.7	5.88	0.63		1.4	4.53	0.58
3 - A26		0.9	4.92	0.46		0.9	5.11	0.48
4 - A22 (North)		1.7	4.71	0.63		2.3	6.21	0.70
	2039 with All Developments							
1 - Lewes Road	D11	1.1	7.55	0.53	D12	0.6	5.66	0.36
2 - A22 (South)		1.5	5.64	0.59		1.1	3.71	0.52
3 - A26		0.6	4.42	0.37		0.7	4.40	0.42
4 - A22 (North)		1.3	3.94	0.56		2.3	5.80	0.68

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Budletts Roundabout
Location	Uckfield, East Sussex
Site number	
Date	26/10/2021
Version	
Status	(new file)
Identifier	
Client	Gleeson Strategic Lane
Jobnumber	gluckf/2001061
Enumerator	MOTION\JoeEarp
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15		15	✓
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00		15	✓
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15		15	✓
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00		15	✓
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15		15	✓
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00		15	✓
D11	2039 with All Developments	AM	DIRECT	07:45	09:15	90	15	✓
D12	2039 with All Developments	PM	DIRECT	16:30	18:00	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Lewes Road	
2	A22 (South)	
3	A26	
4	A22 (North)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Lewes Road	3.60	7.30	11.1	26.5	60.0	10.0	
2 - A22 (South)	3.60	7.80	55.3	23.0	60.0	13.0	
3 - A26	3.50	8.50	20.4	31.5	60.0	12.0	
4 - A22 (North)	3.40	7.80	56.8	26.5	60.0	10.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Lewes Road	0.590	1766
2 - A22 (South)	0.670	2253
3 - A26	0.641	2063
4 - A22 (North)	0.676	2266

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Lewes Road		ONE HOUR	✓	436	100.000
2 - A22 (South)		ONE HOUR	✓	1074	100.000
3 - A26		ONE HOUR	✓	510	100.000
4 - A22 (North)		ONE HOUR	✓	936	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	75	285	76
	2 - A22 (South)	12	0	87	975
	3 - A26	94	95	0	321
	4 - A22 (North)	29	628	279	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	0	0	0
	2 - A22 (South)	0	0	0	0
	3 - A26	0	0	0	0
	4 - A22 (North)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Lewes Road	0.43	5.66	0.8	3.1	A	400	600
2 - A22 (South)	0.66	6.01	2.0	3.1	A	986	1478
3 - A26	0.43	4.79	0.7	3.0	A	468	702
4 - A22 (North)	0.49	3.31	0.9	1.5	A	859	1288

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	328	82	752	1322	0.248	327	101	0.0	0.3	3.611	A
2 - A22 (South)	809	202	480	1931	0.419	806	599	0.0	0.7	3.191	A
3 - A26	384	96	797	1552	0.247	383	488	0.0	0.3	3.077	A
4 - A22 (North)	705	176	151	2164	0.326	703	1029	0.0	0.5	2.460	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	392	98	900	1235	0.317	391	121	0.3	0.5	4.263	A
2 - A22 (South)	966	241	575	1868	0.517	964	717	0.7	1.1	3.978	A
3 - A26	458	115	954	1451	0.316	458	585	0.3	0.5	3.622	A
4 - A22 (North)	841	210	180	2144	0.393	841	1232	0.5	0.6	2.761	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	480	120	1102	1116	0.430	479	148	0.5	0.7	5.638	A
2 - A22 (South)	1182	296	703	1782	0.664	1179	877	1.1	1.9	5.940	A
3 - A26	562	140	1167	1315	0.427	560	715	0.5	0.7	4.765	A
4 - A22 (North)	1031	258	221	2116	0.487	1029	1507	0.6	0.9	3.309	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	480	120	1103	1115	0.430	480	149	0.7	0.8	5.665	A
2 - A22 (South)	1182	296	705	1781	0.664	1182	879	1.9	2.0	6.014	A
3 - A26	562	140	1170	1313	0.428	562	717	0.7	0.7	4.791	A
4 - A22 (North)	1031	258	221	2116	0.487	1031	1511	0.9	0.9	3.315	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	392	98	902	1234	0.318	393	122	0.8	0.5	4.286	A
2 - A22 (South)	966	241	577	1866	0.517	969	719	2.0	1.1	4.028	A
3 - A26	458	115	959	1448	0.317	460	587	0.7	0.5	3.647	A
4 - A22 (North)	841	210	181	2143	0.393	843	1237	0.9	0.6	2.771	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	328	82	755	1321	0.249	329	102	0.5	0.3	3.632	A
2 - A22 (South)	809	202	482	1930	0.419	810	601	1.1	0.7	3.218	A
3 - A26	384	96	802	1549	0.248	384	491	0.5	0.3	3.092	A
4 - A22 (North)	705	176	152	2163	0.326	705	1035	0.6	0.5	2.469	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - A22 (South)	0.72	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - A22 (North)	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - A22 (South)	1.06	0.06	0.68	2.21	3.12			N/A	N/A
3 - A26	0.46	0.00	0.00	0.46	0.46			N/A	N/A
4 - A22 (North)	0.64	0.09	0.79	1.36	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.75	0.03	0.25	0.75	0.75			N/A	N/A
2 - A22 (South)	1.94	0.03	0.27	1.94	1.94			N/A	N/A
3 - A26	0.74	0.03	0.25	0.74	0.74			N/A	N/A
4 - A22 (North)	0.94	0.03	0.25	0.94	0.94			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.75	0.03	0.28	1.02	3.05			N/A	N/A
2 - A22 (South)	1.96	0.03	0.26	1.96	1.96			N/A	N/A
3 - A26	0.74	0.03	0.28	1.02	3.01			N/A	N/A
4 - A22 (North)	0.95	0.03	0.27	0.95	1.50			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2 - A22 (South)	1.08	0.13	1.03	1.67	1.94			N/A	N/A
3 - A26	0.47	0.00	0.00	0.47	0.47			N/A	N/A
4 - A22 (North)	0.65	0.55	1.00	1.40	1.45			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - A22 (South)	0.73	0.06	0.61	1.07	1.64			N/A	N/A
3 - A26	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - A22 (North)	0.49	0.00	0.00	0.49	0.49			N/A	N/A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Lewes Road		ONE HOUR	✓	197	100.000
2 - A22 (South)		ONE HOUR	✓	773	100.000
3 - A26		ONE HOUR	✓	561	100.000
4 - A22 (North)		ONE HOUR	✓	1228	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	89	69	39
	2 - A22 (South)	115	0	78	580
	3 - A26	136	153	0	272
	4 - A22 (North)	66	837	325	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	0	0	0
	2 - A22 (South)	0	0	0	0
	3 - A26	0	0	0	0
	4 - A22 (North)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Lewes Road	0.24	5.18	0.3	1.3	A	181	271
2 - A22 (South)	0.44	3.32	0.8	2.3	A	709	1064
3 - A26	0.40	3.88	0.7	2.8	A	515	772
4 - A22 (North)	0.69	5.87	2.2	4.0	A	1127	1690

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	148	37	987	1184	0.125	148	238	0.0	0.1	3.471	A
2 - A22 (South)	582	145	325	2035	0.286	580	810	0.0	0.4	2.472	A
3 - A26	422	106	551	1710	0.247	421	354	0.0	0.3	2.791	A
4 - A22 (North)	925	231	303	2061	0.449	921	669	0.0	0.8	3.150	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	177	44	1181	1070	0.166	177	285	0.1	0.2	4.030	A
2 - A22 (South)	695	174	389	1992	0.349	694	969	0.4	0.5	2.771	A
3 - A26	504	126	659	1640	0.307	504	424	0.3	0.4	3.165	A
4 - A22 (North)	1104	276	363	2020	0.546	1102	800	0.8	1.2	3.915	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	217	54	1444	914	0.237	216	348	0.2	0.3	5.154	A
2 - A22 (South)	851	213	475	1934	0.440	850	1185	0.5	0.8	3.317	A
3 - A26	618	154	807	1546	0.400	617	518	0.4	0.7	3.873	A
4 - A22 (North)	1352	338	444	1965	0.688	1348	980	1.2	2.2	5.759	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	217	54	1448	912	0.238	217	349	0.3	0.3	5.177	A
2 - A22 (South)	851	213	477	1933	0.440	851	1188	0.8	0.8	3.325	A
3 - A26	618	154	808	1545	0.400	618	520	0.7	0.7	3.882	A
4 - A22 (North)	1352	338	445	1965	0.688	1352	981	2.2	2.2	5.869	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	177	44	1186	1067	0.166	178	286	0.3	0.2	4.051	A
2 - A22 (South)	695	174	391	1991	0.349	696	973	0.8	0.5	2.783	A
3 - A26	504	126	661	1639	0.308	505	426	0.7	0.4	3.178	A
4 - A22 (North)	1104	276	364	2020	0.547	1108	802	2.2	1.2	3.963	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	148	37	992	1181	0.126	149	239	0.2	0.1	3.488	A
2 - A22 (South)	582	145	327	2034	0.286	583	814	0.5	0.4	2.480	A
3 - A26	422	106	553	1708	0.247	423	356	0.4	0.3	2.802	A
4 - A22 (North)	925	231	304	2060	0.449	926	671	1.2	0.8	3.178	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - A22 (South)	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - A26	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - A22 (North)	0.81	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - A22 (South)	0.53	0.06	0.67	1.33	1.42			N/A	N/A
3 - A26	0.44	0.00	0.00	0.44	0.44			N/A	N/A
4 - A22 (North)	1.19	0.05	0.58	2.76	4.02			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.31	0.03	0.25	0.46	0.48			N/A	N/A
2 - A22 (South)	0.78	0.03	0.25	0.78	0.78			N/A	N/A
3 - A26	0.66	0.03	0.25	0.66	0.66			N/A	N/A
4 - A22 (North)	2.16	0.03	0.27	2.16	2.16			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.31	0.03	0.31	1.03	1.29			N/A	N/A
2 - A22 (South)	0.78	0.03	0.28	0.78	2.28			N/A	N/A
3 - A26	0.66	0.03	0.29	1.11	2.85			N/A	N/A
4 - A22 (North)	2.18	0.03	0.26	2.18	2.18			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - A22 (South)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
3 - A26	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4 - A22 (North)	1.22	0.12	1.09	1.93	2.56			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - A22 (South)	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - A26	0.33	0.00	0.00	0.33	0.33			N/A	N/A
4 - A22 (North)	0.82	0.06	0.64	1.51	1.95			N/A	N/A

2039 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Lewes Road		ONE HOUR	✓	525	100.000
2 - A22 (South)		ONE HOUR	✓	961	100.000
3 - A26		ONE HOUR	✓	578	100.000
4 - A22 (North)		ONE HOUR	✓	1138	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	66	353	106
	2 - A22 (South)	10	0	66	885
	3 - A26	104	170	0	304
	4 - A22 (North)	42	764	332	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	0	0	0
	2 - A22 (South)	0	0	0	0
	3 - A26	0	0	0	0
	4 - A22 (North)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Lewes Road	0.61	9.83	1.6	3.6	A	482	723
2 - A22 (South)	0.63	5.89	1.7	2.4	A	882	1323
3 - A26	0.47	5.00	0.9	2.7	A	530	796
4 - A22 (North)	0.61	4.49	1.6	2.4	A	1044	1566

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	395	99	950	1206	0.328	393	117	0.0	0.5	4.420	A
2 - A22 (South)	723	181	593	1855	0.390	721	750	0.0	0.6	3.167	A
3 - A26	435	109	751	1582	0.275	434	563	0.0	0.4	3.131	A
4 - A22 (North)	857	214	213	2122	0.404	854	971	0.0	0.7	2.834	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	472	118	1137	1096	0.431	471	140	0.5	0.7	5.754	A
2 - A22 (South)	864	216	710	1777	0.486	863	898	0.6	0.9	3.932	A
3 - A26	520	130	899	1487	0.349	519	674	0.4	0.5	3.717	A
4 - A22 (North)	1023	256	255	2093	0.489	1022	1163	0.7	0.9	3.357	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	578	145	1391	946	0.611	575	171	0.7	1.5	9.632	A
2 - A22 (South)	1058	265	867	1672	0.633	1055	1099	0.9	1.7	5.809	A
3 - A26	636	159	1099	1359	0.468	635	824	0.5	0.9	4.966	A
4 - A22 (North)	1253	313	312	2055	0.610	1251	1422	0.9	1.5	4.462	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	578	145	1394	944	0.612	578	172	1.5	1.6	9.827	A
2 - A22 (South)	1058	265	871	1669	0.634	1058	1101	1.7	1.7	5.886	A
3 - A26	636	159	1102	1357	0.469	636	827	0.9	0.9	4.998	A
4 - A22 (North)	1253	313	313	2054	0.610	1253	1426	1.5	1.6	4.491	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	472	118	1141	1093	0.432	475	141	1.6	0.8	5.852	A
2 - A22 (South)	864	216	715	1774	0.487	867	901	1.7	1.0	3.983	A
3 - A26	520	130	903	1484	0.350	521	678	0.9	0.5	3.745	A
4 - A22 (North)	1023	256	256	2093	0.489	1025	1168	1.6	1.0	3.382	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	395	99	954	1203	0.328	396	118	0.8	0.5	4.469	A
2 - A22 (South)	723	181	597	1853	0.390	725	754	1.0	0.6	3.196	A
3 - A26	435	109	755	1579	0.276	436	567	0.5	0.4	3.152	A
4 - A22 (North)	857	214	214	2121	0.404	858	977	1.0	0.7	2.852	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.48	0.00	0.00	0.48	0.48			N/A	N/A
2 - A22 (South)	0.64	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - A22 (North)	0.67	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.75	0.07	0.77	1.28	1.28			N/A	N/A
2 - A22 (South)	0.94	0.06	0.74	1.75	2.37			N/A	N/A
3 - A26	0.53	0.06	0.66	1.33	1.42			N/A	N/A
4 - A22 (North)	0.95	0.06	0.76	1.76	2.39			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	1.53	0.03	0.27	1.53	1.72			N/A	N/A
2 - A22 (South)	1.70	0.03	0.26	1.70	1.70			N/A	N/A
3 - A26	0.87	0.03	0.26	0.87	0.87			N/A	N/A
4 - A22 (North)	1.54	0.03	0.26	1.54	1.54			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	1.56	0.03	0.28	1.56	3.59			N/A	N/A
2 - A22 (South)	1.71	0.03	0.27	1.71	1.71			N/A	N/A
3 - A26	0.88	0.03	0.28	0.88	2.68			N/A	N/A
4 - A22 (North)	1.55	0.03	0.26	1.55	1.55			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.77	0.08	0.81	1.28	1.28			N/A	N/A
2 - A22 (South)	0.96	0.16	0.98	1.22	1.64			N/A	N/A
3 - A26	0.54	0.54	1.00	1.40	1.45			N/A	N/A
4 - A22 (North)	0.96	0.37	1.01	1.35	1.35			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.49	0.04	0.41	1.30	1.44			N/A	N/A
2 - A22 (South)	0.64	0.06	0.60	1.40	1.50			N/A	N/A
3 - A26	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - A22 (North)	0.68	0.08	0.77	1.38	1.45			N/A	N/A

2039 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Lewes Road		ONE HOUR	✓	252	100.000
2 - A22 (South)		ONE HOUR	✓	997	100.000
3 - A26		ONE HOUR	✓	566	100.000
4 - A22 (North)		ONE HOUR	✓	1245	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	40	84	128
	2 - A22 (South)	119	0	139	739
	3 - A26	129	175	0	262
	4 - A22 (North)	76	923	246	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	0	0	0
	2 - A22 (South)	0	0	0	0
	3 - A26	0	0	0	0
	4 - A22 (North)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Lewes Road	0.31	5.84	0.4	1.7	A	231	347
2 - A22 (South)	0.57	4.40	1.3	1.7	A	915	1372
3 - A26	0.46	4.84	0.8	2.8	A	519	779
4 - A22 (North)	0.70	6.20	2.3	4.4	A	1142	1714

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	190	47	1008	1171	0.162	189	243	0.0	0.2	3.664	A
2 - A22 (South)	751	188	343	2023	0.371	748	854	0.0	0.6	2.820	A
3 - A26	426	107	740	1589	0.268	425	352	0.0	0.4	3.088	A
4 - A22 (North)	937	234	317	2051	0.457	934	847	0.0	0.8	3.213	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	227	57	1207	1054	0.215	226	291	0.2	0.3	4.346	A
2 - A22 (South)	896	224	411	1977	0.453	895	1022	0.6	0.8	3.324	A
3 - A26	509	127	885	1495	0.340	508	421	0.4	0.5	3.645	A
4 - A22 (North)	1119	280	380	2009	0.557	1118	1014	0.8	1.2	4.031	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	277	69	1475	896	0.310	277	356	0.3	0.4	5.809	A
2 - A22 (South)	1098	274	503	1916	0.573	1096	1249	0.8	1.3	4.379	A
3 - A26	623	156	1084	1368	0.455	622	515	0.5	0.8	4.815	A
4 - A22 (North)	1371	343	465	1952	0.702	1367	1241	1.2	2.3	6.108	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	277	69	1480	893	0.311	277	357	0.4	0.4	5.844	A
2 - A22 (South)	1098	274	504	1915	0.573	1098	1253	1.3	1.3	4.404	A
3 - A26	623	156	1086	1367	0.456	623	516	0.8	0.8	4.839	A
4 - A22 (North)	1371	343	466	1951	0.703	1371	1243	2.3	2.3	6.202	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	227	57	1213	1051	0.216	227	292	0.4	0.3	4.373	A
2 - A22 (South)	896	224	413	1976	0.454	898	1027	1.3	0.8	3.348	A
3 - A26	509	127	888	1493	0.341	510	423	0.8	0.5	3.664	A
4 - A22 (North)	1119	280	381	2008	0.557	1123	1017	2.3	1.3	4.090	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	190	47	1014	1168	0.162	190	244	0.3	0.2	3.683	A
2 - A22 (South)	751	188	345	2021	0.371	752	858	0.8	0.6	2.836	A
3 - A26	426	107	743	1586	0.269	427	354	0.5	0.4	3.105	A
4 - A22 (North)	937	234	319	2050	0.457	939	851	1.3	0.8	3.244	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - A22 (South)	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - A22 (North)	0.84	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - A22 (South)	0.82	0.07	0.79	1.23	1.70			N/A	N/A
3 - A26	0.51	0.05	0.56	1.31	1.41			N/A	N/A
4 - A22 (North)	1.25	0.05	0.53	2.93	4.45			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.44	0.03	0.25	0.46	0.48			N/A	N/A
2 - A22 (South)	1.33	0.03	0.26	1.33	1.33			N/A	N/A
3 - A26	0.83	0.03	0.25	0.83	0.83			N/A	N/A
4 - A22 (North)	2.31	0.03	0.27	2.31	2.31			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.45	0.03	0.32	1.39	1.73			N/A	N/A
2 - A22 (South)	1.34	0.03	0.26	1.34	1.34			N/A	N/A
3 - A26	0.83	0.03	0.28	0.83	2.79			N/A	N/A
4 - A22 (North)	2.34	0.03	0.26	2.34	2.34			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2 - A22 (South)	0.84	0.51	0.98	1.40	1.45			N/A	N/A
3 - A26	0.52	0.52	1.00	1.40	1.45			N/A	N/A
4 - A22 (North)	1.27	0.11	1.09	2.18	2.84			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - A22 (South)	0.59	0.07	0.72	1.35	1.42			N/A	N/A
3 - A26	0.37	0.00	0.00	0.37	0.37			N/A	N/A
4 - A22 (North)	0.85	0.05	0.58	1.66	2.28			N/A	N/A

2039 with Downlands Farm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Lewes Road		ONE HOUR	✓	534	100.000
2 - A22 (South)		ONE HOUR	✓	949	100.000
3 - A26		ONE HOUR	✓	573	100.000
4 - A22 (North)		ONE HOUR	✓	1162	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	61	370	103
	2 - A22 (South)	9	0	59	881
	3 - A26	102	187	0	284
	4 - A22 (North)	50	777	335	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	0	0	0
	2 - A22 (South)	0	0	0	0
	3 - A26	0	0	0	0
	4 - A22 (North)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Lewes Road	0.64	10.74	1.7	4.1	B	490	735
2 - A22 (South)	0.63	5.88	1.7	2.3	A	871	1306
3 - A26	0.46	4.92	0.9	2.7	A	526	789
4 - A22 (North)	0.63	4.71	1.7	2.7	A	1066	1599

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	402	101	975	1191	0.338	400	121	0.0	0.5	4.539	A
2 - A22 (South)	714	179	606	1847	0.387	712	769	0.0	0.6	3.165	A
3 - A26	431	108	745	1585	0.272	430	573	0.0	0.4	3.111	A
4 - A22 (North)	875	219	224	2115	0.414	872	951	0.0	0.7	2.891	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	480	120	1166	1078	0.445	479	145	0.5	0.8	5.997	A
2 - A22 (South)	853	213	725	1767	0.483	852	920	0.6	0.9	3.929	A
3 - A26	515	129	891	1492	0.345	515	686	0.4	0.5	3.683	A
4 - A22 (North)	1045	261	268	2085	0.501	1043	1138	0.7	1.0	3.454	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	588	147	1427	924	0.636	584	177	0.8	1.7	10.480	B
2 - A22 (South)	1045	261	886	1659	0.630	1042	1126	0.9	1.7	5.802	A
3 - A26	631	158	1090	1364	0.462	630	838	0.5	0.9	4.890	A
4 - A22 (North)	1279	320	327	2044	0.626	1277	1392	1.0	1.6	4.674	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	588	147	1430	923	0.637	588	177	1.7	1.7	10.743	B
2 - A22 (South)	1045	261	889	1657	0.631	1045	1128	1.7	1.7	5.879	A
3 - A26	631	158	1093	1362	0.463	631	841	0.9	0.9	4.922	A
4 - A22 (North)	1279	320	328	2044	0.626	1279	1396	1.6	1.7	4.708	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	480	120	1171	1076	0.446	484	145	1.7	0.8	6.120	A
2 - A22 (South)	853	213	730	1763	0.484	856	924	1.7	0.9	3.981	A
3 - A26	515	129	896	1488	0.346	516	690	0.9	0.5	3.710	A
4 - A22 (North)	1045	261	269	2084	0.501	1047	1144	1.7	1.0	3.479	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	402	101	979	1189	0.338	403	121	0.8	0.5	4.590	A
2 - A22 (South)	714	179	610	1844	0.387	716	773	0.9	0.6	3.192	A
3 - A26	431	108	749	1583	0.273	432	576	0.5	0.4	3.129	A
4 - A22 (North)	875	219	225	2114	0.414	876	956	1.0	0.7	2.912	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	0.63	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26	0.37	0.00	0.00	0.37	0.37			N/A	N/A
4 - A22 (North)	0.70	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.79	0.07	0.77	1.08	1.61			N/A	N/A
2 - A22 (South)	0.93	0.06	0.75	1.71	2.28			N/A	N/A
3 - A26	0.52	0.06	0.62	1.32	1.41			N/A	N/A
4 - A22 (North)	1.00	0.06	0.74	1.91	2.71			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	1.69	0.03	0.27	1.69	3.15			N/A	N/A
2 - A22 (South)	1.67	0.03	0.26	1.67	1.67			N/A	N/A
3 - A26	0.85	0.03	0.25	0.85	0.85			N/A	N/A
4 - A22 (North)	1.65	0.03	0.26	1.65	1.65			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	1.73	0.03	0.28	1.73	4.13			N/A	N/A
2 - A22 (South)	1.69	0.03	0.27	1.69	1.69			N/A	N/A
3 - A26	0.86	0.03	0.28	0.86	2.73			N/A	N/A
4 - A22 (North)	1.66	0.03	0.26	1.66	1.66			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.82	0.07	0.80	1.15	1.64			N/A	N/A
2 - A22 (South)	0.95	0.16	0.98	1.15	1.60			N/A	N/A
3 - A26	0.53	0.53	1.00	1.40	1.45			N/A	N/A
4 - A22 (North)	1.01	0.28	1.03	1.23	1.63			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.52	0.04	0.40	1.09	1.09			N/A	N/A
2 - A22 (South)	0.64	0.06	0.60	1.39	1.49			N/A	N/A
3 - A26	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - A22 (North)	0.71	0.07	0.76	1.41	1.49			N/A	N/A

2039 with Downlands Farm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Lewes Road		ONE HOUR	✓	274	100.000
2 - A22 (South)		ONE HOUR	✓	1011	100.000
3 - A26		ONE HOUR	✓	580	100.000
4 - A22 (North)		ONE HOUR	✓	1244	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	48	87	139
	2 - A22 (South)	124	0	129	758
	3 - A26	128	174	0	278
	4 - A22 (North)	84	919	241	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	0	0	0
	2 - A22 (South)	0	0	0	0
	3 - A26	0	0	0	0
	4 - A22 (North)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Lewes Road	0.34	6.02	0.5	2.1	A	251	377
2 - A22 (South)	0.58	4.53	1.4	1.8	A	928	1392
3 - A26	0.48	5.11	0.9	2.6	A	532	798
4 - A22 (North)	0.70	6.21	2.3	4.4	A	1142	1712

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	206	52	1001	1176	0.175	205	252	0.0	0.2	3.706	A
2 - A22 (South)	761	190	350	2018	0.377	759	856	0.0	0.6	2.854	A
3 - A26	437	109	766	1572	0.278	435	343	0.0	0.4	3.163	A
4 - A22 (North)	937	234	320	2050	0.457	933	882	0.0	0.8	3.215	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	246	62	1198	1060	0.232	246	302	0.2	0.3	4.421	A
2 - A22 (South)	909	227	419	1972	0.461	908	1024	0.6	0.8	3.380	A
3 - A26	521	130	917	1475	0.353	521	410	0.4	0.5	3.770	A
4 - A22 (North)	1118	280	383	2007	0.557	1117	1055	0.8	1.2	4.035	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	302	75	1464	902	0.334	301	369	0.3	0.5	5.978	A
2 - A22 (South)	1113	278	513	1909	0.583	1111	1253	0.8	1.4	4.498	A
3 - A26	639	160	1122	1344	0.475	637	502	0.5	0.9	5.084	A
4 - A22 (North)	1370	342	468	1949	0.703	1365	1291	1.2	2.3	6.119	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	302	75	1469	900	0.335	302	370	0.5	0.5	6.017	A
2 - A22 (South)	1113	278	514	1908	0.583	1113	1256	1.4	1.4	4.526	A
3 - A26	639	160	1124	1342	0.476	639	503	0.9	0.9	5.114	A
4 - A22 (North)	1370	342	469	1949	0.703	1370	1294	2.3	2.3	6.214	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	246	62	1204	1056	0.233	247	303	0.5	0.3	4.453	A
2 - A22 (South)	909	227	421	1971	0.461	911	1029	1.4	0.9	3.403	A
3 - A26	521	130	920	1473	0.354	523	412	0.9	0.6	3.792	A
4 - A22 (North)	1118	280	384	2006	0.557	1123	1059	2.3	1.3	4.093	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	206	52	1006	1173	0.176	207	253	0.3	0.2	3.726	A
2 - A22 (South)	761	190	352	2017	0.377	762	861	0.9	0.6	2.870	A
3 - A26	437	109	770	1570	0.278	437	345	0.6	0.4	3.183	A
4 - A22 (North)	937	234	321	2049	0.457	938	886	1.3	0.8	3.246	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - A22 (South)	0.60	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - A22 (North)	0.84	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - A22 (South)	0.85	0.07	0.78	1.38	1.80			N/A	N/A
3 - A26	0.54	0.06	0.68	1.34	1.42			N/A	N/A
4 - A22 (North)	1.25	0.05	0.53	2.93	4.45			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.50	0.03	0.25	0.50	0.50			N/A	N/A
2 - A22 (South)	1.38	0.03	0.26	1.38	1.38			N/A	N/A
3 - A26	0.90	0.03	0.26	0.90	0.90			N/A	N/A
4 - A22 (North)	2.31	0.03	0.27	2.31	2.31			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.50	0.03	0.32	1.47	2.11			N/A	N/A
2 - A22 (South)	1.39	0.03	0.26	1.39	1.39			N/A	N/A
3 - A26	0.90	0.03	0.28	0.90	2.64			N/A	N/A
4 - A22 (North)	2.34	0.03	0.26	2.34	2.34			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - A22 (South)	0.86	0.46	0.98	1.41	1.46			N/A	N/A
3 - A26	0.55	0.55	1.00	1.40	1.45			N/A	N/A
4 - A22 (North)	1.27	0.11	1.09	2.18	2.85			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - A22 (South)	0.61	0.07	0.72	1.35	1.43			N/A	N/A
3 - A26	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - A22 (North)	0.85	0.05	0.58	1.66	2.28			N/A	N/A

2039 with All Developments, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D11	2039 with All Developments	AM	DIRECT	07:45	09:15	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
1 - Lewes Road		DIRECT	✓	100.000
2 - A22 (South)		DIRECT	✓	100.000
3 - A26		DIRECT	✓	100.000
4 - A22 (North)		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/hr)

07:45 - 08:00

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	61	370	103
	2 - A22 (South)	9	0	43	804
	3 - A26	102	191	0	257
	4 - A22 (North)	50	770	339	1

08:00 - 08:15

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	32	198	239
	2 - A22 (South)	34	0	73	864
	3 - A26	69	40	0	365
	4 - A22 (North)	140	407	458	0

08:15 - 08:30

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	32	198	239
	2 - A22 (South)	34	0	73	864
	3 - A26	69	40	0	365
	4 - A22 (North)	140	407	458	0

08:30 - 08:45

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	32	198	239
	2 - A22 (South)	34	0	73	864
	3 - A26	69	40	0	365
	4 - A22 (North)	140	407	458	0

08:45 - 09:00

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	32	198	239
	2 - A22 (South)	34	0	73	864
	3 - A26	69	40	0	365
	4 - A22 (North)	140	407	458	0

09:00 - 09:15

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	32	198	239
	2 - A22 (South)	34	0	73	864
	3 - A26	69	40	0	365
	4 - A22 (North)	140	407	458	0

Vehicle Mix

07:45 - 08:00

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	0	0	0
	2 - A22 (South)	0	0	0	0
	3 - A26	0	0	0	0
	4 - A22 (North)	0	0	0	0

08:00 - 08:15

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	2
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	6
	4 - A22 (North)	1	7	5	0

08:15 - 08:30

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	2
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	6
	4 - A22 (North)	1	7	5	0

08:30 - 08:45

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	2
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	6
	4 - A22 (North)	1	7	5	0

08:45 - 09:00

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	2
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	6
	4 - A22 (North)	1	7	5	0

09:00 - 09:15

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	2
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	6
	4 - A22 (North)	1	7	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Lewes Road	0.53	7.55	1.1	?	A	480	720
2 - A22 (South)	0.59	5.64	1.5	?	A	952	1427
3 - A26	0.37	4.42	0.6	~1	A	487	730
4 - A22 (North)	0.56	3.94	1.3	?	A	1031	1546

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	534	134	1295	1002	0.533	530	160	0.0	1.1	7.548	A
2 - A22 (South)	856	214	808	1712	0.500	852	1017	0.0	1.0	4.168	A
3 - A26	550	138	912	1478	0.372	548	747	0.0	0.6	3.860	A
4 - A22 (North)	1160	290	301	2062	0.562	1155	1159	0.0	1.3	3.945	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	469	117	908	1231	0.381	471	243	1.1	0.6	4.883	A
2 - A22 (South)	971	243	897	1652	0.588	969	482	1.0	1.5	5.611	A
3 - A26	474	119	1135	1335	0.355	474	730	0.6	0.6	4.415	A
4 - A22 (North)	1005	251	144	2168	0.463	1006	1465	1.3	0.9	3.259	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	469	117	905	1232	0.381	469	243	0.6	0.6	4.850	A
2 - A22 (South)	971	243	895	1653	0.587	971	479	1.5	1.5	5.636	A
3 - A26	474	119	1137	1334	0.356	474	729	0.6	0.6	4.424	A
4 - A22 (North)	1005	251	143	2169	0.463	1005	1468	0.9	0.9	3.250	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	469	117	905	1232	0.381	469	243	0.6	0.6	4.849	A
2 - A22 (South)	971	243	895	1653	0.587	971	479	1.5	1.5	5.636	A
3 - A26	474	119	1137	1334	0.356	474	729	0.6	0.6	4.423	A
4 - A22 (North)	1005	251	143	2169	0.463	1005	1468	0.9	0.9	3.250	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	469	117	905	1232	0.381	469	243	0.6	0.6	4.849	A
2 - A22 (South)	971	243	895	1653	0.587	971	479	1.5	1.5	5.636	A
3 - A26	474	119	1137	1334	0.356	474	729	0.6	0.6	4.423	A
4 - A22 (North)	1005	251	143	2169	0.463	1005	1468	0.9	0.9	3.252	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	469	117	905	1232	0.381	469	243	0.6	0.6	4.847	A
2 - A22 (South)	971	243	895	1653	0.587	971	479	1.5	1.5	5.636	A
3 - A26	474	119	1137	1334	0.356	474	729	0.6	0.6	4.424	A
4 - A22 (North)	1005	251	143	2169	0.463	1005	1468	0.9	0.9	3.250	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	1.12	?	?	?	?			N/A	N/A
2 - A22 (South)	0.99	~1	~1	~1	~1			N/A	N/A
3 - A26	0.59	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	1.27	?	?	?	?			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.64	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	1.50	?	?	?	?			N/A	N/A
3 - A26	0.59	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	0.91	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.63	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	1.51	?	?	?	?			N/A	N/A
3 - A26	0.58	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	0.91	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.63	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	1.51	?	?	?	?			N/A	N/A
3 - A26	0.58	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	0.91	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.63	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	1.51	?	?	?	?			N/A	N/A
3 - A26	0.58	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	0.91	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.63	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	1.52	?	?	?	?			N/A	N/A
3 - A26	0.58	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	0.91	~1	~1	~1	~1			N/A	N/A

2039 with All Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A22 (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A22 (North) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Flow Arm 1	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D12	2039 with All Developments	PM	DIRECT	16:30	18:00	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
1 - Lewes Road		DIRECT	✓	100.000
2 - A22 (South)		DIRECT	✓	100.000
3 - A26		DIRECT	✓	100.000
4 - A22 (North)		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/hr)

16:30 - 16:45

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	48	87	139
	2 - A22 (South)	124	0	134	769
	3 - A26	128	187	0	276
	4 - A22 (North)	84	899	170	0

16:45 - 17:00

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	28	121	210
	2 - A22 (South)	46	0	47	525
	3 - A26	156	73	0	363
	4 - A22 (North)	207	833	381	0

17:00 - 17:15

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	28	121	210
	2 - A22 (South)	46	0	47	525
	3 - A26	156	73	0	363
	4 - A22 (North)	207	833	381	0

17:15 - 17:30

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	28	121	210
	2 - A22 (South)	46	0	47	525
	3 - A26	156	73	0	363
	4 - A22 (North)	207	833	381	0

17:30 - 17:45

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	28	121	210
	2 - A22 (South)	46	0	47	525
	3 - A26	156	73	0	363
	4 - A22 (North)	207	833	381	0

17:45 - 18:00

Demand (PCU/hr)

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	28	121	210
	2 - A22 (South)	46	0	47	525
	3 - A26	156	73	0	363
	4 - A22 (North)	207	833	381	0

Vehicle Mix

16:30 - 16:45

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	0	0	0
	2 - A22 (South)	0	0	0	0
	3 - A26	0	0	0	0
	4 - A22 (North)	0	0	0	0

16:45 - 17:00

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	1
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	5
	4 - A22 (North)	2	7	6	0

17:00 - 17:15

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	1
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	5
	4 - A22 (North)	2	7	6	0

17:15 - 17:30

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	1
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	5
	4 - A22 (North)	2	7	6	0

17:30 - 17:45

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	1
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	5
	4 - A22 (North)	2	7	6	0

17:45 - 18:00

Heavy Vehicle Percentages

		To			
		1 - Lewes Road	2 - A22 (South)	3 - A26	4 - A22 (North)
From	1 - Lewes Road	0	2	4	1
	2 - A22 (South)	4	0	8	7
	3 - A26	4	7	0	5
	4 - A22 (North)	2	7	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Lewes Road	0.36	5.66	0.6	~1	A	345	517
2 - A22 (South)	0.52	3.71	1.1	?	A	687	1031
3 - A26	0.42	4.40	0.7	~1	A	591	887
4 - A22 (North)	0.68	5.80	2.3	?	A	1376	2064

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	274	69	1250	1029	0.266	273	334	0.0	0.4	4.751	A
2 - A22 (South)	1027	257	394	1989	0.516	1023	1128	0.0	1.1	3.709	A
3 - A26	591	148	1028	1404	0.421	588	389	0.0	0.7	4.397	A
4 - A22 (North)	1153	288	437	1970	0.585	1147	1179	0.0	1.4	4.345	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	359	90	1285	1008	0.356	358	408	0.4	0.6	5.641	A
2 - A22 (South)	619	155	709	1778	0.348	621	934	1.1	0.6	3.328	A
3 - A26	592	148	782	1561	0.379	592	547	0.7	0.6	3.903	A
4 - A22 (North)	1420	355	276	2079	0.683	1417	1098	1.4	2.2	5.747	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	359	90	1287	1007	0.356	359	409	0.6	0.6	5.664	A
2 - A22 (South)	619	155	711	1776	0.348	619	934	0.6	0.6	3.320	A
3 - A26	592	148	781	1562	0.379	592	549	0.6	0.6	3.898	A
4 - A22 (North)	1420	355	275	2080	0.683	1420	1098	2.2	2.3	5.795	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	359	90	1287	1007	0.356	359	409	0.6	0.6	5.665	A
2 - A22 (South)	619	155	711	1776	0.348	619	934	0.6	0.6	3.323	A
3 - A26	592	148	781	1562	0.379	592	549	0.6	0.6	3.898	A
4 - A22 (North)	1420	355	275	2080	0.683	1420	1098	2.3	2.3	5.798	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	359	90	1287	1007	0.356	359	409	0.6	0.6	5.665	A
2 - A22 (South)	619	155	711	1776	0.348	619	934	0.6	0.6	3.320	A
3 - A26	592	148	781	1562	0.379	592	549	0.6	0.6	3.900	A
4 - A22 (North)	1420	355	275	2080	0.683	1420	1098	2.3	2.3	5.798	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Lewes Road	359	90	1287	1007	0.356	359	409	0.6	0.6	5.665	A
2 - A22 (South)	619	155	711	1776	0.348	619	934	0.6	0.6	3.323	A
3 - A26	592	148	781	1562	0.379	592	549	0.6	0.6	3.900	A
4 - A22 (North)	1420	355	275	2080	0.683	1420	1098	2.3	2.3	5.798	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.36	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	1.06	?	?	?	?			N/A	N/A
3 - A26	0.72	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	1.39	?	?	?	?			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.56	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	0.57	~1	~1	~1	~1			N/A	N/A
3 - A26	0.65	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	2.24	?	?	?	?			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.56	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	0.57	~1	~1	~1	~1			N/A	N/A
3 - A26	0.64	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	2.27	?	?	?	?			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.56	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	0.57	~1	~1	~1	~1			N/A	N/A
3 - A26	0.64	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	2.27	?	?	?	?			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.56	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	0.57	~1	~1	~1	~1			N/A	N/A
3 - A26	0.64	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	2.28	?	?	?	?			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Lewes Road	0.56	~1	~1	~1	~1			N/A	N/A
2 - A22 (South)	0.57	~1	~1	~1	~1			N/A	N/A
3 - A26	0.64	~1	~1	~1	~1			N/A	N/A
4 - A22 (North)	2.28	?	?	?	?			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: M01b-Budletts Roundabout Jacobs w Mitigation 22-03-18.j9
Path: C:\Users\JoeEarp\OneDrive - Motion\TP Projects\gluckf 2001061\Analysis\Junction Modelling
Report generation date: 18/03/2022 14:14:00

»2018 Baseline, AM
»2018 Baseline, PM
»2039 Baseline, AM
»2039 Baseline, PM
»2039 with Downlands Farm, AM
»2039 with Downlands Farm, PM
»2039 with All Developments, AM
»2039 with All Developments, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2018 Baseline							
1 - A26 (North)	D1	1.0	5.32	0.51	D2	1.1	6.88	0.53
2 - London Road (East)		2.0	8.50	0.67		0.4	3.82	0.30
3 - A26 (South)		0.6	3.96	0.36		1.3	4.91	0.57
4 - London Road (West)		0.3	3.76	0.26		1.0	6.36	0.51
	2039 Baseline							
1 - A26 (North)	D3	1.2	5.97	0.55	D4	1.8	9.78	0.64
2 - London Road (East)		2.3	9.68	0.70		0.5	4.18	0.34
3 - A26 (South)		0.7	4.41	0.41		1.1	4.53	0.52
4 - London Road (West)		0.4	3.87	0.28		1.6	7.82	0.61
	2039 with Downlands Farm							
1 - A26 (North)	D5	1.3	6.37	0.57	D6	2.2	11.33	0.69
2 - London Road (East)		2.9	11.68	0.75		0.5	4.31	0.35
3 - A26 (South)		0.8	4.78	0.45		1.1	4.63	0.53
4 - London Road (West)		0.4	4.00	0.28		1.7	8.37	0.63
	2039 with All Developments							
1 - A26 (North)	D7	1.4	6.56	0.58	D8	2.6	13.21	0.73
2 - London Road (East)		3.3	12.87	0.77		0.5	4.26	0.34
3 - A26 (South)		0.8	4.85	0.45		1.1	4.62	0.53
4 - London Road (West)		0.4	3.98	0.27		1.9	8.98	0.66

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Budletts Roundabout
Location	Uckfield, East Sussex
Site number	
Date	26/10/2021
Version	
Status	(new file)
Identifier	
Client	Gleeson Strategic Lane
Jobnumber	gluckf/2001061
Enumerator	MOTION\JoeEarp
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A26 (North)	
2	London Road (East)	
3	A26 (South)	
4	London Road (West)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A26 (North)	3.00	7.22	13.5	90.0	60.0	23.0	
2 - London Road (East)	3.19	7.17	10.9	45.0	60.0	24.0	
3 - A26 (South)	3.63	7.10	12.9	130.0	60.0	20.0	
4 - London Road (West)	3.00	7.42	17.1	20.0	60.0	23.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A26 (North)	0.564	1645
2 - London Road (East)	0.552	1596
3 - A26 (South)	0.593	1792
4 - London Road (West)	0.560	1682

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	639	100.000
2 - London Road (East)		ONE HOUR	✓	775	100.000
3 - A26 (South)		ONE HOUR	✓	471	100.000
4 - London Road (West)		ONE HOUR	✓	298	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	194	432	13
	2 - London Road (East)	227	0	231	317
	3 - A26 (South)	280	137	0	54
	4 - London Road (West)	8	209	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.51	5.32	1.0	1.5	A	586	880
2 - London Road (East)	0.67	8.50	2.0	3.2	A	711	1067
3 - A26 (South)	0.36	3.96	0.6	2.7	A	432	648
4 - London Road (West)	0.26	3.76	0.3	1.4	A	273	410

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	481	120	320	1465	0.328	479	386	0.0	0.5	3.644	A
2 - London Road (East)	583	146	394	1378	0.423	581	405	0.0	0.7	4.497	A
3 - A26 (South)	355	89	417	1544	0.230	353	558	0.0	0.3	3.020	A
4 - London Road (West)	224	56	483	1412	0.159	224	288	0.0	0.2	3.028	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	574	144	384	1429	0.402	574	462	0.5	0.7	4.204	A
2 - London Road (East)	697	174	472	1335	0.522	695	485	0.7	1.1	5.612	A
3 - A26 (South)	423	106	500	1495	0.283	423	668	0.3	0.4	3.357	A
4 - London Road (West)	268	67	578	1358	0.197	268	345	0.2	0.2	3.300	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	704	176	470	1381	0.510	702	566	0.7	1.0	5.295	A
2 - London Road (East)	853	213	578	1277	0.668	850	594	1.1	2.0	8.357	A
3 - A26 (South)	519	130	611	1429	0.363	518	817	0.4	0.6	3.947	A
4 - London Road (West)	328	82	707	1286	0.255	328	421	0.2	0.3	3.754	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	704	176	470	1380	0.510	704	567	1.0	1.0	5.318	A
2 - London Road (East)	853	213	579	1276	0.669	853	595	2.0	2.0	8.501	A
3 - A26 (South)	519	130	613	1428	0.363	519	819	0.6	0.6	3.958	A
4 - London Road (West)	328	82	709	1285	0.255	328	423	0.3	0.3	3.760	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	574	144	384	1429	0.402	576	464	1.0	0.7	4.229	A
2 - London Road (East)	697	174	474	1334	0.522	700	486	2.0	1.1	5.710	A
3 - A26 (South)	423	106	503	1493	0.284	424	671	0.6	0.4	3.368	A
4 - London Road (West)	268	67	581	1357	0.197	268	347	0.3	0.2	3.309	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	481	120	322	1464	0.329	482	388	0.7	0.5	3.670	A
2 - London Road (East)	583	146	397	1377	0.424	585	407	1.1	0.7	4.552	A
3 - A26 (South)	355	89	420	1542	0.230	355	561	0.4	0.3	3.034	A
4 - London Road (West)	224	56	486	1410	0.159	225	290	0.2	0.2	3.038	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - London Road (East)	0.73	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26 (South)	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - London Road (West)	0.19	0.00	0.00	0.19	0.19			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.67	0.10	0.83	1.37	1.44			N/A	N/A
2 - London Road (East)	1.08	0.07	0.83	2.00	2.84			N/A	N/A
3 - A26 (South)	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - London Road (West)	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.03	0.03	0.26	1.03	1.03			N/A	N/A
2 - London Road (East)	1.96	0.03	0.27	1.96	3.16			N/A	N/A
3 - A26 (South)	0.57	0.03	0.25	0.57	0.57			N/A	N/A
4 - London Road (West)	0.34	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.03	0.03	0.27	1.03	1.52			N/A	N/A
2 - London Road (East)	1.99	0.03	0.27	1.99	1.99			N/A	N/A
3 - A26 (South)	0.57	0.03	0.30	1.35	2.67			N/A	N/A
4 - London Road (West)	0.34	0.03	0.32	1.15	1.40			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.68	0.30	0.95	1.39	1.45			N/A	N/A
2 - London Road (East)	1.11	0.09	0.97	1.88	2.52			N/A	N/A
3 - A26 (South)	0.40	0.00	0.00	0.40	0.40			N/A	N/A
4 - London Road (West)	0.25	0.00	0.00	0.25	0.25			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.49	0.04	0.45	1.27	1.39			N/A	N/A
2 - London Road (East)	0.74	0.05	0.49	1.41	1.92			N/A	N/A
3 - A26 (South)	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - London Road (West)	0.19	0.00	0.00	0.19	0.19			N/A	N/A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	528	100.000
2 - London Road (East)		ONE HOUR	✓	365	100.000
3 - A26 (South)		ONE HOUR	✓	879	100.000
4 - London Road (West)		ONE HOUR	✓	529	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	202	319	7
	2 - London Road (East)	49	0	234	82
	3 - A26 (South)	411	406	0	62
	4 - London Road (West)	64	377	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.53	6.88	1.1	2.3	A	485	727
2 - London Road (East)	0.30	3.82	0.4	1.7	A	335	502
3 - A26 (South)	0.57	4.91	1.3	1.7	A	807	1210
4 - London Road (West)	0.51	6.36	1.0	2.4	A	485	728

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	398	99	653	1277	0.311	396	393	0.0	0.4	4.076	A
2 - London Road (East)	275	69	310	1425	0.193	274	739	0.0	0.2	3.125	A
3 - A26 (South)	662	165	104	1730	0.382	659	481	0.0	0.6	3.355	A
4 - London Road (West)	398	100	650	1318	0.302	397	113	0.0	0.4	3.898	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	475	119	782	1204	0.394	474	471	0.4	0.6	4.922	A
2 - London Road (East)	328	82	372	1391	0.236	328	884	0.2	0.3	3.386	A
3 - A26 (South)	790	198	124	1718	0.460	789	575	0.6	0.8	3.871	A
4 - London Road (West)	476	119	778	1247	0.381	475	136	0.4	0.6	4.660	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	581	145	957	1106	0.526	580	576	0.6	1.1	6.816	A
2 - London Road (East)	402	100	454	1345	0.299	401	1082	0.3	0.4	3.812	A
3 - A26 (South)	968	242	152	1702	0.569	966	704	0.8	1.3	4.882	A
4 - London Road (West)	582	146	952	1149	0.507	581	166	0.6	1.0	6.317	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	581	145	959	1105	0.526	581	577	1.1	1.1	6.878	A
2 - London Road (East)	402	100	456	1344	0.299	402	1084	0.4	0.4	3.818	A
3 - A26 (South)	968	242	152	1702	0.569	968	706	1.3	1.3	4.906	A
4 - London Road (West)	582	146	953	1148	0.507	582	166	1.0	1.0	6.362	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	475	119	785	1203	0.395	476	472	1.1	0.7	4.968	A
2 - London Road (East)	328	82	374	1390	0.236	329	888	0.4	0.3	3.393	A
3 - A26 (South)	790	198	124	1718	0.460	792	578	1.3	0.9	3.895	A
4 - London Road (West)	476	119	780	1245	0.382	477	136	1.0	0.6	4.698	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	398	99	657	1275	0.312	398	395	0.7	0.5	4.111	A
2 - London Road (East)	275	69	312	1424	0.193	275	743	0.3	0.2	3.134	A
3 - A26 (South)	662	165	104	1730	0.383	663	483	0.9	0.6	3.375	A
4 - London Road (West)	398	100	653	1317	0.302	399	114	0.6	0.4	3.927	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.45	0.00	0.00	0.45	0.45			N/A	N/A
2 - London Road (East)	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A26 (South)	0.62	0.55	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.43	0.00	0.00	0.43	0.43			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.64	0.09	0.81	1.36	1.43			N/A	N/A
2 - London Road (East)	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A26 (South)	0.85	0.08	0.84	1.20	1.67			N/A	N/A
4 - London Road (West)	0.61	0.09	0.80	1.36	1.43			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.09	0.03	0.26	1.09	1.09			N/A	N/A
2 - London Road (East)	0.42	0.03	0.25	0.45	0.48			N/A	N/A
3 - A26 (South)	1.30	0.03	0.26	1.30	1.30			N/A	N/A
4 - London Road (West)	1.01	0.03	0.26	1.01	1.01			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.10	0.03	0.27	1.10	2.34			N/A	N/A
2 - London Road (East)	0.43	0.03	0.32	1.35	1.67			N/A	N/A
3 - A26 (South)	1.31	0.03	0.26	1.31	1.31			N/A	N/A
4 - London Road (West)	1.02	0.03	0.27	1.02	2.38			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.66	0.13	0.88	1.38	1.44			N/A	N/A
2 - London Road (East)	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3 - A26 (South)	0.86	0.39	0.97	1.41	1.46			N/A	N/A
4 - London Road (West)	0.62	0.14	0.89	1.38	1.44			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.46	0.04	0.39	1.22	1.36			N/A	N/A
2 - London Road (East)	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3 - A26 (South)	0.62	0.07	0.75	1.35	1.43			N/A	N/A
4 - London Road (West)	0.44	0.03	0.35	1.14	1.32			N/A	N/A

2039 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	673	100.000
2 - London Road (East)		ONE HOUR	✓	802	100.000
3 - A26 (South)		ONE HOUR	✓	524	100.000
4 - London Road (West)		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	206	446	21
	2 - London Road (East)	178	0	212	412
	3 - A26 (South)	289	164	0	71
	4 - London Road (West)	7	227	95	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.55	5.97	1.2	1.5	A	618	926
2 - London Road (East)	0.70	9.68	2.3	6.2	A	736	1104
3 - A26 (South)	0.41	4.41	0.7	2.8	A	481	721
4 - London Road (West)	0.28	3.87	0.4	1.3	A	302	453

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	507	127	365	1440	0.352	505	355	0.0	0.5	3.840	A
2 - London Road (East)	604	151	421	1363	0.443	601	448	0.0	0.8	4.702	A
3 - A26 (South)	394	99	458	1520	0.259	393	564	0.0	0.3	3.189	A
4 - London Road (West)	248	62	473	1417	0.175	247	378	0.0	0.2	3.074	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	605	151	436	1399	0.432	604	425	0.5	0.8	4.523	A
2 - London Road (East)	721	180	505	1317	0.547	719	536	0.8	1.2	6.004	A
3 - A26 (South)	471	118	548	1467	0.321	471	676	0.3	0.5	3.612	A
4 - London Road (West)	296	74	566	1365	0.217	296	452	0.2	0.3	3.366	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	741	185	534	1344	0.551	739	520	0.8	1.2	5.933	A
2 - London Road (East)	883	221	617	1255	0.703	879	656	1.2	2.3	9.448	A
3 - A26 (South)	577	144	669	1395	0.414	576	827	0.5	0.7	4.393	A
4 - London Road (West)	362	91	693	1294	0.280	362	552	0.3	0.4	3.859	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	741	185	535	1344	0.551	741	522	1.2	1.2	5.972	A
2 - London Road (East)	883	221	619	1254	0.704	883	657	2.3	2.3	9.675	A
3 - A26 (South)	577	144	673	1393	0.414	577	829	0.7	0.7	4.412	A
4 - London Road (West)	362	91	695	1293	0.280	362	555	0.4	0.4	3.866	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	605	151	438	1399	0.433	607	428	1.2	0.8	4.557	A
2 - London Road (East)	721	180	507	1316	0.548	725	538	2.3	1.2	6.138	A
3 - A26 (South)	471	118	553	1464	0.322	472	679	0.7	0.5	3.631	A
4 - London Road (West)	296	74	569	1364	0.217	296	456	0.4	0.3	3.373	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	507	127	366	1439	0.352	508	358	0.8	0.5	3.870	A
2 - London Road (East)	604	151	424	1362	0.443	605	450	1.2	0.8	4.768	A
3 - A26 (South)	394	99	461	1518	0.260	395	568	0.5	0.4	3.208	A
4 - London Road (West)	248	62	476	1416	0.175	248	380	0.3	0.2	3.085	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.79	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26 (South)	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4 - London Road (West)	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.76	0.09	0.83	1.42	1.49			N/A	N/A
2 - London Road (East)	1.19	0.06	0.79	2.55	3.58			N/A	N/A
3 - A26 (South)	0.47	0.00	0.00	0.47	0.47			N/A	N/A
4 - London Road (West)	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.21	0.03	0.26	1.21	1.21			N/A	N/A
2 - London Road (East)	2.29	0.03	0.28	2.29	6.16			N/A	N/A
3 - A26 (South)	0.70	0.03	0.25	0.70	0.70			N/A	N/A
4 - London Road (West)	0.39	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.22	0.03	0.27	1.22	1.22			N/A	N/A
2 - London Road (East)	2.33	0.03	0.27	2.33	2.66			N/A	N/A
3 - A26 (South)	0.70	0.03	0.28	0.92	2.80			N/A	N/A
4 - London Road (West)	0.39	0.03	0.32	1.27	1.28			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.77	0.22	0.94	1.39	1.45			N/A	N/A
2 - London Road (East)	1.23	0.07	0.93	2.45	3.31			N/A	N/A
3 - A26 (South)	0.48	0.00	0.00	0.48	0.48			N/A	N/A
4 - London Road (West)	0.28	0.00	0.00	0.28	0.28			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.55	0.05	0.57	1.31	1.41			N/A	N/A
2 - London Road (East)	0.80	0.04	0.44	1.74	2.62			N/A	N/A
3 - A26 (South)	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4 - London Road (West)	0.21	0.00	0.00	0.21	0.21			N/A	N/A

2039 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	605	100.000
2 - London Road (East)		ONE HOUR	✓	398	100.000
3 - A26 (South)		ONE HOUR	✓	796	100.000
4 - London Road (West)		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	236	361	8
	2 - London Road (East)	71	0	220	107
	3 - A26 (South)	329	402	0	65
	4 - London Road (West)	78	463	120	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.64	9.78	1.8	3.0	A	555	833
2 - London Road (East)	0.34	4.18	0.5	2.3	A	365	548
3 - A26 (South)	0.52	4.53	1.1	1.5	A	730	1096
4 - London Road (West)	0.61	7.82	1.6	1.8	A	607	910

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	455	114	738	1229	0.371	453	359	0.0	0.6	4.626	A
2 - London Road (East)	300	75	366	1394	0.215	299	825	0.0	0.3	3.284	A
3 - A26 (South)	599	150	140	1709	0.351	597	525	0.0	0.5	3.233	A
4 - London Road (West)	498	124	602	1345	0.370	495	135	0.0	0.6	4.224	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	544	136	884	1147	0.474	543	429	0.6	0.9	5.946	A
2 - London Road (East)	358	89	439	1354	0.264	357	988	0.3	0.4	3.613	A
3 - A26 (South)	716	179	167	1693	0.423	715	629	0.5	0.7	3.676	A
4 - London Road (West)	594	149	720	1279	0.465	593	162	0.6	0.9	5.241	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	666	167	1081	1036	0.643	663	525	0.9	1.8	9.565	A
2 - London Road (East)	438	110	536	1300	0.337	438	1208	0.4	0.5	4.171	A
3 - A26 (South)	876	219	204	1670	0.525	875	769	0.7	1.1	4.517	A
4 - London Road (West)	728	182	882	1188	0.612	725	198	0.9	1.5	7.722	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	666	167	1084	1034	0.644	666	526	1.8	1.8	9.776	A
2 - London Road (East)	438	110	538	1299	0.337	438	1212	0.5	0.5	4.182	A
3 - A26 (South)	876	219	205	1670	0.525	876	772	1.1	1.1	4.534	A
4 - London Road (West)	728	182	883	1188	0.613	728	198	1.5	1.6	7.823	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	544	136	889	1144	0.475	547	431	1.8	0.9	6.064	A
2 - London Road (East)	358	89	442	1352	0.265	358	994	0.5	0.4	3.624	A
3 - A26 (South)	716	179	168	1692	0.423	717	633	1.1	0.7	3.695	A
4 - London Road (West)	594	149	722	1278	0.465	597	162	1.6	0.9	5.311	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	455	114	743	1226	0.371	457	360	0.9	0.6	4.686	A
2 - London Road (East)	300	75	369	1392	0.215	300	831	0.4	0.3	3.299	A
3 - A26 (South)	599	150	140	1708	0.351	600	529	0.7	0.5	3.249	A
4 - London Road (West)	498	124	605	1344	0.370	499	136	0.9	0.6	4.268	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.58	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3 - A26 (South)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.58	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.89	0.07	0.81	1.49	1.88			N/A	N/A
2 - London Road (East)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A26 (South)	0.73	0.09	0.83	1.40	1.47			N/A	N/A
4 - London Road (West)	0.86	0.08	0.82	1.32	1.75			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.75	0.03	0.27	1.75	2.94			N/A	N/A
2 - London Road (East)	0.50	0.03	0.25	0.50	0.50			N/A	N/A
3 - A26 (South)	1.09	0.03	0.26	1.09	1.09			N/A	N/A
4 - London Road (West)	1.55	0.03	0.27	1.55	1.55			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.78	0.03	0.27	1.78	3.00			N/A	N/A
2 - London Road (East)	0.51	0.03	0.30	1.40	2.31			N/A	N/A
3 - A26 (South)	1.10	0.03	0.27	1.10	1.30			N/A	N/A
4 - London Road (West)	1.56	0.03	0.27	1.56	1.75			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.92	0.08	0.87	1.48	1.85			N/A	N/A
2 - London Road (East)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A26 (South)	0.74	0.51	0.98	1.40	1.45			N/A	N/A
4 - London Road (West)	0.88	0.11	0.91	1.06	1.56			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.60	0.04	0.44	1.45	1.48			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.54	0.06	0.67	1.33	1.42			N/A	N/A
4 - London Road (West)	0.59	0.05	0.49	1.37	1.48			N/A	N/A

2039 with Downlands Farm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	690	100.000
2 - London Road (East)		ONE HOUR	✓	844	100.000
3 - A26 (South)		ONE HOUR	✓	557	100.000
4 - London Road (West)		ONE HOUR	✓	316	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	26	194	449	21
	2 - London Road (East)	189	0	239	416
	3 - A26 (South)	281	207	0	69
	4 - London Road (West)	7	213	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.57	6.37	1.3	1.5	A	633	950
2 - London Road (East)	0.75	11.68	2.9	11.7	B	774	1162
3 - A26 (South)	0.45	4.78	0.8	2.6	A	511	767
4 - London Road (West)	0.28	4.00	0.4	1.2	A	290	435

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	519	130	387	1427	0.364	517	377	0.0	0.6	3.947	A
2 - London Road (East)	635	159	444	1351	0.470	632	460	0.0	0.9	4.983	A
3 - A26 (South)	419	105	488	1502	0.279	418	588	0.0	0.4	3.316	A
4 - London Road (West)	238	59	527	1387	0.172	237	379	0.0	0.2	3.129	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	620	155	463	1384	0.448	619	451	0.6	0.8	4.701	A
2 - London Road (East)	759	190	531	1303	0.582	757	551	0.9	1.4	6.571	A
3 - A26 (South)	501	125	585	1445	0.347	500	704	0.4	0.5	3.808	A
4 - London Road (West)	284	71	631	1329	0.214	284	454	0.2	0.3	3.444	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	760	190	567	1326	0.573	758	552	0.8	1.3	6.316	A
2 - London Road (East)	929	232	650	1237	0.751	923	675	1.4	2.9	11.256	B
3 - A26 (South)	613	153	713	1369	0.448	612	860	0.5	0.8	4.752	A
4 - London Road (West)	348	87	772	1250	0.278	347	554	0.3	0.4	3.987	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	760	190	568	1325	0.573	760	554	1.3	1.3	6.366	A
2 - London Road (East)	929	232	652	1236	0.752	929	676	2.9	2.9	11.684	B
3 - A26 (South)	613	153	718	1366	0.449	613	863	0.8	0.8	4.781	A
4 - London Road (West)	348	87	774	1249	0.279	348	557	0.4	0.4	3.996	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	620	155	465	1383	0.448	622	454	1.3	0.8	4.742	A
2 - London Road (East)	759	190	534	1301	0.583	765	553	2.9	1.4	6.786	A
3 - A26 (South)	501	125	591	1441	0.347	502	708	0.8	0.5	3.838	A
4 - London Road (West)	284	71	634	1327	0.214	285	458	0.4	0.3	3.456	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	519	130	389	1426	0.364	520	379	0.8	0.6	3.978	A
2 - London Road (East)	635	159	446	1350	0.471	638	463	1.4	0.9	5.070	A
3 - A26 (South)	419	105	492	1500	0.280	420	592	0.5	0.4	3.335	A
4 - London Road (West)	238	59	530	1385	0.172	238	382	0.3	0.2	3.140	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.57	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.88	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26 (South)	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - London Road (West)	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.80	0.09	0.84	1.44	1.44			N/A	N/A
2 - London Road (East)	1.37	0.06	0.72	3.20	4.71			N/A	N/A
3 - A26 (South)	0.53	0.53	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.27	0.00	0.00	0.27	0.27			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.32	0.03	0.26	1.32	1.32			N/A	N/A
2 - London Road (East)	2.88	0.03	0.29	2.88	11.65			N/A	N/A
3 - A26 (South)	0.80	0.03	0.25	0.80	0.80			N/A	N/A
4 - London Road (West)	0.38	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.33	0.03	0.27	1.33	1.33			N/A	N/A
2 - London Road (East)	2.95	0.03	0.28	2.95	5.50			N/A	N/A
3 - A26 (South)	0.81	0.03	0.28	0.81	2.59			N/A	N/A
4 - London Road (West)	0.38	0.03	0.33	1.24	1.24			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.82	0.18	0.93	1.42	1.48			N/A	N/A
2 - London Road (East)	1.42	0.06	0.80	3.29	4.76			N/A	N/A
3 - A26 (South)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.27	0.00	0.00	0.27	0.27			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.58	0.06	0.59	1.33	1.42			N/A	N/A
2 - London Road (East)	0.90	0.04	0.39	2.14	3.61			N/A	N/A
3 - A26 (South)	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - London Road (West)	0.21	0.00	0.00	0.21	0.21			N/A	N/A

2039 with Downlands Farm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	641	100.000
2 - London Road (East)		ONE HOUR	✓	404	100.000
3 - A26 (South)		ONE HOUR	✓	798	100.000
4 - London Road (West)		ONE HOUR	✓	675	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	23	250	360	8
	2 - London Road (East)	70	0	227	107
	3 - A26 (South)	327	406	0	65
	4 - London Road (West)	78	467	130	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.69	11.33	2.2	6.5	B	588	882
2 - London Road (East)	0.35	4.31	0.5	2.5	A	371	556
3 - A26 (South)	0.53	4.63	1.1	1.5	A	732	1098
4 - London Road (West)	0.63	8.37	1.7	1.9	A	619	929

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	483	121	752	1221	0.395	480	373	0.0	0.6	4.839	A
2 - London Road (East)	304	76	390	1381	0.220	303	842	0.0	0.3	3.338	A
3 - A26 (South)	601	150	156	1699	0.354	599	537	0.0	0.5	3.264	A
4 - London Road (West)	508	127	620	1335	0.381	506	135	0.0	0.6	4.328	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	576	144	900	1138	0.506	575	447	0.6	1.0	6.377	A
2 - London Road (East)	363	91	467	1338	0.271	363	1008	0.3	0.4	3.691	A
3 - A26 (South)	717	179	187	1681	0.427	717	643	0.5	0.7	3.729	A
4 - London Road (West)	607	152	742	1267	0.479	606	162	0.6	0.9	5.434	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	706	176	1101	1025	0.689	701	547	1.0	2.1	10.981	B
2 - London Road (East)	445	111	570	1281	0.347	444	1232	0.4	0.5	4.298	A
3 - A26 (South)	879	220	229	1656	0.531	877	786	0.7	1.1	4.611	A
4 - London Road (West)	743	186	908	1174	0.633	740	198	0.9	1.7	8.243	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	706	176	1104	1023	0.690	706	548	2.1	2.2	11.332	B
2 - London Road (East)	445	111	573	1279	0.348	445	1236	0.5	0.5	4.312	A
3 - A26 (South)	879	220	229	1656	0.531	879	789	1.1	1.1	4.631	A
4 - London Road (West)	743	186	909	1173	0.634	743	198	1.7	1.7	8.372	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	576	144	905	1135	0.508	581	449	2.2	1.0	6.546	A
2 - London Road (East)	363	91	472	1336	0.272	364	1014	0.5	0.4	3.706	A
3 - A26 (South)	717	179	187	1680	0.427	719	648	1.1	0.8	3.751	A
4 - London Road (West)	607	152	744	1265	0.480	610	162	1.7	0.9	5.516	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	483	121	757	1219	0.396	484	376	1.0	0.7	4.910	A
2 - London Road (East)	304	76	393	1379	0.221	305	847	0.4	0.3	3.351	A
3 - A26 (South)	601	150	157	1699	0.354	602	541	0.8	0.6	3.283	A
4 - London Road (West)	508	127	623	1334	0.381	509	136	0.9	0.6	4.374	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.65	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.61	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.01	0.06	0.79	1.89	2.64			N/A	N/A
2 - London Road (East)	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - A26 (South)	0.74	0.09	0.83	1.41	1.48			N/A	N/A
4 - London Road (West)	0.91	0.07	0.82	1.55	1.92			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	2.13	0.03	0.28	2.13	6.46			N/A	N/A
2 - London Road (East)	0.53	0.03	0.25	0.53	0.53			N/A	N/A
3 - A26 (South)	1.12	0.03	0.26	1.12	1.12			N/A	N/A
4 - London Road (West)	1.68	0.03	0.27	1.68	1.70			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	2.18	0.03	0.28	2.18	4.34			N/A	N/A
2 - London Road (East)	0.53	0.03	0.30	1.38	2.46			N/A	N/A
3 - A26 (South)	1.12	0.03	0.27	1.12	1.27			N/A	N/A
4 - London Road (West)	1.71	0.03	0.27	1.71	1.94			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.05	0.07	0.84	1.92	2.69			N/A	N/A
2 - London Road (East)	0.38	0.00	0.00	0.38	0.38			N/A	N/A
3 - A26 (South)	0.75	0.51	0.98	1.40	1.45			N/A	N/A
4 - London Road (West)	0.93	0.10	0.92	1.41	1.78			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.66	0.04	0.41	1.37	1.99			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.55	0.06	0.67	1.34	1.42			N/A	N/A
4 - London Road (West)	0.62	0.05	0.48	1.37	1.37			N/A	N/A

2039 with All Developments, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	8.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	701	100.000
2 - London Road (East)		ONE HOUR	✓	863	100.000
3 - A26 (South)		ONE HOUR	✓	552	100.000
4 - London Road (West)		ONE HOUR	✓	307	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	26	192	459	24
	2 - London Road (East)	204	0	237	422
	3 - A26 (South)	262	223	0	67
	4 - London Road (West)	7	204	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.58	6.56	1.4	1.6	A	643	965
2 - London Road (East)	0.77	12.87	3.3	14.6	B	792	1188
3 - A26 (South)	0.45	4.85	0.8	2.6	A	507	760
4 - London Road (West)	0.27	3.98	0.4	1.1	A	282	423

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	528	132	392	1424	0.371	525	374	0.0	0.6	3.995	A
2 - London Road (East)	650	162	454	1346	0.483	646	464	0.0	0.9	5.120	A
3 - A26 (South)	416	104	506	1492	0.279	414	593	0.0	0.4	3.337	A
4 - London Road (West)	231	58	536	1382	0.167	230	384	0.0	0.2	3.124	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	630	158	470	1381	0.456	629	448	0.6	0.8	4.785	A
2 - London Road (East)	776	194	543	1296	0.599	774	556	0.9	1.5	6.860	A
3 - A26 (South)	496	124	606	1432	0.346	496	711	0.4	0.5	3.841	A
4 - London Road (West)	276	69	642	1323	0.209	276	460	0.2	0.3	3.438	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	772	193	575	1321	0.584	770	547	0.8	1.4	6.500	A
2 - London Road (East)	950	238	664	1229	0.773	943	680	1.5	3.2	12.287	B
3 - A26 (South)	608	152	739	1353	0.449	607	869	0.5	0.8	4.814	A
4 - London Road (West)	338	85	785	1243	0.272	338	561	0.3	0.4	3.975	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	772	193	576	1321	0.584	772	549	1.4	1.4	6.557	A
2 - London Road (East)	950	238	666	1228	0.774	950	682	3.2	3.3	12.874	B
3 - A26 (South)	608	152	744	1350	0.450	608	872	0.8	0.8	4.846	A
4 - London Road (West)	338	85	787	1241	0.272	338	565	0.4	0.4	3.984	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	630	158	471	1380	0.457	632	451	1.4	0.8	4.831	A
2 - London Road (East)	776	194	546	1295	0.599	783	558	3.3	1.5	7.127	A
3 - A26 (South)	496	124	613	1428	0.347	497	716	0.8	0.5	3.873	A
4 - London Road (West)	276	69	646	1321	0.209	276	465	0.4	0.3	3.447	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	528	132	394	1423	0.371	529	377	0.8	0.6	4.029	A
2 - London Road (East)	650	162	456	1344	0.483	652	467	1.5	0.9	5.218	A
3 - A26 (South)	416	104	511	1489	0.279	416	598	0.5	0.4	3.357	A
4 - London Road (West)	231	58	539	1380	0.167	231	387	0.3	0.2	3.136	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.58	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.92	0.55	1.00	1.40	1.45			N/A	N/A
3 - A26 (South)	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4 - London Road (West)	0.20	0.00	0.00	0.20	0.20			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.83	0.08	0.84	1.08	1.59			N/A	N/A
2 - London Road (East)	1.46	0.05	0.67	3.56	5.27			N/A	N/A
3 - A26 (South)	0.53	0.53	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.38	0.03	0.26	1.38	1.38			N/A	N/A
2 - London Road (East)	3.22	0.03	0.30	3.23	14.62			N/A	N/A
3 - A26 (South)	0.81	0.03	0.25	0.81	0.81			N/A	N/A
4 - London Road (West)	0.37	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.39	0.03	0.27	1.39	1.39			N/A	N/A
2 - London Road (East)	3.31	0.03	0.28	3.31	7.79			N/A	N/A
3 - A26 (South)	0.81	0.03	0.28	0.81	2.61			N/A	N/A
4 - London Road (West)	0.37	0.03	0.33	1.06	1.06			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.85	0.16	0.93	1.02	1.02			N/A	N/A
2 - London Road (East)	1.52	0.05	0.69	3.72	5.54			N/A	N/A
3 - A26 (South)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.27	0.00	0.00	0.27	0.27			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.59	0.06	0.59	1.34	1.43			N/A	N/A
2 - London Road (East)	0.95	0.04	0.37	2.34	4.06			N/A	N/A
3 - A26 (South)	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4 - London Road (West)	0.20	0.00	0.00	0.20	0.20			N/A	N/A

2039 with All Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26 (North)		ONE HOUR	✓	661	100.000
2 - London Road (East)		ONE HOUR	✓	398	100.000
3 - A26 (South)		ONE HOUR	✓	802	100.000
4 - London Road (West)		ONE HOUR	✓	702	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	21	286	346	8
	2 - London Road (East)	67	0	228	103
	3 - A26 (South)	319	418	0	65
	4 - London Road (West)	79	482	141	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A26 (North)	2 - London Road (East)	3 - A26 (South)	4 - London Road (West)
From	1 - A26 (North)	0	0	0	0
	2 - London Road (East)	0	0	0	0
	3 - A26 (South)	0	0	0	0
	4 - London Road (West)	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26 (North)	0.73	13.21	2.6	10.4	B	607	910
2 - London Road (East)	0.34	4.26	0.5	2.4	A	365	548
3 - A26 (South)	0.53	4.62	1.1	1.5	A	736	1104
4 - London Road (West)	0.66	8.98	1.9	3.0	A	644	966

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	498	124	780	1205	0.413	495	364	0.0	0.7	5.047	A
2 - London Road (East)	300	75	386	1383	0.217	299	889	0.0	0.3	3.318	A
3 - A26 (South)	604	151	149	1703	0.355	602	536	0.0	0.5	3.261	A
4 - London Road (West)	529	132	619	1336	0.396	526	132	0.0	0.6	4.431	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	594	149	934	1119	0.531	593	436	0.7	1.1	6.821	A
2 - London Road (East)	358	89	463	1341	0.267	357	1064	0.3	0.4	3.662	A
3 - A26 (South)	721	180	179	1686	0.428	720	641	0.5	0.7	3.725	A
4 - London Road (West)	631	158	741	1267	0.498	630	158	0.6	1.0	5.635	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	728	182	1142	1001	0.727	722	534	1.1	2.5	12.643	B
2 - London Road (East)	438	110	564	1285	0.341	438	1300	0.4	0.5	4.248	A
3 - A26 (South)	883	221	219	1662	0.531	882	783	0.7	1.1	4.603	A
4 - London Road (West)	773	193	907	1174	0.658	769	193	1.0	1.9	8.810	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	728	182	1146	999	0.728	727	535	2.5	2.6	13.213	B
2 - London Road (East)	438	110	568	1283	0.342	438	1306	0.5	0.5	4.263	A
3 - A26 (South)	883	221	219	1662	0.531	883	787	1.1	1.1	4.622	A
4 - London Road (West)	773	193	908	1173	0.659	773	194	1.9	1.9	8.978	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	594	149	940	1115	0.533	600	438	2.6	1.2	7.062	A
2 - London Road (East)	358	89	468	1338	0.267	358	1072	0.5	0.4	3.677	A
3 - A26 (South)	721	180	179	1685	0.428	722	647	1.1	0.8	3.744	A
4 - London Road (West)	631	158	743	1266	0.499	635	159	1.9	1.0	5.736	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26 (North)	498	124	785	1203	0.414	499	366	1.2	0.7	5.132	A
2 - London Road (East)	300	75	390	1381	0.217	300	895	0.4	0.3	3.331	A
3 - A26 (South)	604	151	150	1703	0.355	605	540	0.8	0.6	3.280	A
4 - London Road (West)	529	132	622	1334	0.396	530	133	1.0	0.7	4.486	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.70	0.55	1.00	1.40	1.45			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.55	0.55	1.00	1.40	1.45			N/A	N/A
4 - London Road (West)	0.65	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.12	0.06	0.75	2.33	3.26			N/A	N/A
2 - London Road (East)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - A26 (South)	0.74	0.09	0.83	1.41	1.48			N/A	N/A
4 - London Road (West)	0.98	0.07	0.81	1.78	2.39			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	2.53	0.03	0.29	2.53	10.36			N/A	N/A
2 - London Road (East)	0.51	0.03	0.25	0.51	0.51			N/A	N/A
3 - A26 (South)	1.12	0.03	0.26	1.12	1.12			N/A	N/A
4 - London Road (West)	1.87	0.03	0.27	1.87	3.05			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	2.61	0.03	0.28	2.61	6.66			N/A	N/A
2 - London Road (East)	0.52	0.03	0.30	1.39	2.37			N/A	N/A
3 - A26 (South)	1.13	0.03	0.27	1.13	1.25			N/A	N/A
4 - London Road (West)	1.90	0.03	0.27	1.90	2.27			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	1.16	0.06	0.74	2.50	3.54			N/A	N/A
2 - London Road (East)	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - A26 (South)	0.75	0.51	0.98	1.40	1.45			N/A	N/A
4 - London Road (West)	1.01	0.09	0.92	1.69	2.02			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26 (North)	0.71	0.04	0.38	1.64	2.69			N/A	N/A
2 - London Road (East)	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - A26 (South)	0.55	0.06	0.68	1.34	1.42			N/A	N/A
4 - London Road (West)	0.66	0.05	0.46	1.11	1.72			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: M02b-Black Down Rbout Jacobs w Miti 22-03-18.j9
Path: C:\Users\JoeEarp\OneDrive - Motion\TP Projects\gluckf 2001061\Analysis\Junction Modelling
Report generation date: 18/03/2022 14:39:24

»2018 Baseline, AM
»2018 Baseline, PM
»2039 Baseline, AM
»2039 Baseline, PM
»2039 with Downlands Farm, AM
»2039 with Downlands Farm, PM
»2039 with All Developments, AM
»2039 with All Developments, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2018 Baseline							
1 - A26	D1	0.8	3.39	0.44	D2	0.6	2.81	0.38
2 - A22 (South)		1.7	5.90	0.63		1.4	5.52	0.58
3 - A22 (West)		1.2	3.08	0.55		1.5	3.37	0.60
	2039 Baseline							
1 - A26	D3	0.8	3.41	0.44	D4	0.6	2.80	0.37
2 - A22 (South)		1.7	5.91	0.63		1.4	5.49	0.58
3 - A22 (West)		1.2	3.08	0.55		1.5	3.37	0.60
	2039 with Downlands Farm							
1 - A26	D5	0.8	3.46	0.45	D6	0.6	2.85	0.38
2 - A22 (South)		1.7	5.83	0.63		1.4	5.68	0.59
3 - A22 (West)		1.2	3.10	0.55		1.5	3.38	0.60
	2039 with All Developments							
1 - A26	D7	0.9	3.54	0.46	D8	0.6	2.84	0.38
2 - A22 (South)		1.7	5.92	0.63		1.4	5.60	0.59
3 - A22 (West)		1.2	3.12	0.55		1.5	3.39	0.60

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Black Down Roundabout
Location	Uckfield, East Sussex
Site number	
Date	27/10/2021
Version	
Status	(new file)
Identifier	
Client	Gleeson Strategic Land
Jobnumber	gluckf/2001061
Enumerator	MOTION\JoeEarp
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A26 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A26	
2	A22 (South)	
3	A22 (West)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A26	3.30	9.48	104.3	37.0	60.0	27.0	
2 - A22 (South)	3.80	8.60	12.4	37.0	60.0	14.5	
3 - A22 (West)	3.70	9.95	71.1	30.0	60.0	18.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A26	0.732	2659
2 - A22 (South)	0.618	1938
3 - A22 (West)	0.754	2750

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	753	100.000
2 - A22 (South)		ONE HOUR	✓	942	100.000
3 - A22 (West)		ONE HOUR	✓	1311	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	325	428
	2 - A22 (South)	167	0	775
	3 - A22 (West)	358	953	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.44	3.39	0.8	2.7	A	691	1036
2 - A22 (South)	0.63	5.90	1.7	2.5	A	864	1297
3 - A22 (West)	0.55	3.08	1.2	1.7	A	1203	1804

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	567	142	716	2135	0.266	565	394	0.0	0.4	2.292	A
2 - A22 (South)	709	177	321	1740	0.408	706	960	0.0	0.7	3.476	A
3 - A22 (West)	987	247	125	2655	0.372	985	903	0.0	0.6	2.152	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	677	169	856	2032	0.333	676	472	0.4	0.5	2.653	A
2 - A22 (South)	847	212	384	1701	0.498	846	1148	0.7	1.0	4.204	A
3 - A22 (West)	1179	295	150	2637	0.447	1178	1080	0.6	0.8	2.466	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	829	207	1048	1892	0.438	828	577	0.5	0.8	3.381	A
2 - A22 (South)	1037	259	471	1647	0.630	1034	1405	1.0	1.7	5.845	A
3 - A22 (West)	1443	361	183	2611	0.553	1442	1322	0.8	1.2	3.074	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	829	207	1049	1891	0.438	829	578	0.8	0.8	3.389	A
2 - A22 (South)	1037	259	471	1647	0.630	1037	1407	1.7	1.7	5.902	A
3 - A22 (West)	1443	361	184	2611	0.553	1443	1324	1.2	1.2	3.082	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	677	169	858	2031	0.333	678	473	0.8	0.5	2.662	A
2 - A22 (South)	847	212	385	1700	0.498	850	1151	1.7	1.0	4.245	A
3 - A22 (West)	1179	295	151	2636	0.447	1180	1084	1.2	0.8	2.477	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	567	142	718	2133	0.266	567	396	0.5	0.4	2.301	A
2 - A22 (South)	709	177	323	1739	0.408	710	963	1.0	0.7	3.503	A
3 - A22 (West)	987	247	126	2655	0.372	988	907	0.8	0.6	2.160	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A22 (South)	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	0.59	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.50	0.05	0.47	1.29	1.39			N/A	N/A
2 - A22 (South)	0.98	0.07	0.79	1.81	2.47			N/A	N/A
3 - A22 (West)	0.80	0.07	0.76	1.20	1.69			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.78	0.03	0.25	0.78	0.78			N/A	N/A
2 - A22 (South)	1.67	0.03	0.26	1.67	1.67			N/A	N/A
3 - A22 (West)	1.23	0.03	0.26	1.23	1.23			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.78	0.03	0.28	0.78	2.71			N/A	N/A
2 - A22 (South)	1.69	0.03	0.26	1.69	1.69			N/A	N/A
3 - A22 (West)	1.23	0.03	0.26	1.23	1.23			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.50	0.50	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	1.00	0.16	1.00	1.40	1.74			N/A	N/A
3 - A22 (West)	0.81	0.55	1.00	1.40	1.45			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A22 (South)	0.69	0.06	0.67	1.25	1.25			N/A	N/A
3 - A22 (West)	0.59	0.12	0.86	1.37	1.44			N/A	N/A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A26 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	700	100.000
2 - A22 (South)		ONE HOUR	✓	834	100.000
3 - A22 (West)		ONE HOUR	✓	1466	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	159	541
	2 - A22 (South)	83	0	751
	3 - A22 (West)	714	752	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.38	2.81	0.6	2.8	A	642	963
2 - A22 (South)	0.58	5.52	1.4	1.7	A	765	1148
3 - A22 (West)	0.60	3.37	1.5	2.6	A	1345	2018

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	527	132	565	2245	0.235	526	598	0.0	0.3	2.093	A
2 - A22 (South)	628	157	406	1687	0.372	626	684	0.0	0.6	3.384	A
3 - A22 (West)	1104	276	62	2703	0.408	1101	970	0.0	0.7	2.243	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	629	157	675	2164	0.291	629	716	0.3	0.4	2.344	A
2 - A22 (South)	750	187	486	1638	0.458	749	818	0.6	0.8	4.045	A
3 - A22 (West)	1318	329	75	2693	0.489	1317	1160	0.7	1.0	2.615	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	771	193	827	2054	0.375	770	876	0.4	0.6	2.803	A
2 - A22 (South)	918	230	595	1570	0.585	916	1002	0.8	1.4	5.482	A
3 - A22 (West)	1614	404	91	2681	0.602	1612	1420	1.0	1.5	3.360	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	771	193	828	2053	0.375	771	877	0.6	0.6	2.807	A
2 - A22 (South)	918	230	596	1570	0.585	918	1003	1.4	1.4	5.522	A
3 - A22 (West)	1614	404	91	2681	0.602	1614	1422	1.5	1.5	3.374	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	629	157	677	2163	0.291	630	718	0.6	0.4	2.348	A
2 - A22 (South)	750	187	487	1637	0.458	752	820	1.4	0.9	4.077	A
3 - A22 (West)	1318	329	75	2693	0.489	1320	1164	1.5	1.0	2.625	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	527	132	567	2244	0.235	527	601	0.4	0.3	2.099	A
2 - A22 (South)	628	157	408	1686	0.372	629	686	0.9	0.6	3.406	A
3 - A22 (West)	1104	276	63	2702	0.408	1105	974	1.0	0.7	2.254	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - A22 (South)	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	0.69	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2 - A22 (South)	0.84	0.08	0.81	1.24	1.70			N/A	N/A
3 - A22 (West)	0.95	0.06	0.69	1.85	2.61			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.60	0.03	0.25	0.60	0.60			N/A	N/A
2 - A22 (South)	1.39	0.03	0.26	1.39	1.39			N/A	N/A
3 - A22 (West)	1.50	0.03	0.26	1.50	1.50			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.60	0.03	0.30	1.35	2.81			N/A	N/A
2 - A22 (South)	1.40	0.03	0.27	1.40	1.40			N/A	N/A
3 - A22 (West)	1.51	0.03	0.26	1.51	1.51			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2 - A22 (South)	0.85	0.23	0.96	1.42	1.48			N/A	N/A
3 - A22 (West)	0.96	0.54	1.01	1.43	1.48			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - A22 (South)	0.60	0.06	0.64	1.34	1.43			N/A	N/A
3 - A22 (West)	0.69	0.12	0.87	1.38	1.44			N/A	N/A

2039 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A26 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	756	100.000
2 - A22 (South)		ONE HOUR	✓	942	100.000
3 - A22 (West)		ONE HOUR	✓	1310	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	327	429
	2 - A22 (South)	167	0	775
	3 - A22 (West)	355	955	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.44	3.41	0.8	2.7	A	694	1041
2 - A22 (South)	0.63	5.91	1.7	2.5	A	864	1297
3 - A22 (West)	0.55	3.08	1.2	1.7	A	1202	1803

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	569	142	717	2134	0.267	568	392	0.0	0.4	2.296	A
2 - A22 (South)	709	177	322	1739	0.408	706	963	0.0	0.7	3.477	A
3 - A22 (West)	986	247	125	2655	0.371	984	903	0.0	0.6	2.151	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	680	170	858	2031	0.335	679	469	0.4	0.5	2.661	A
2 - A22 (South)	847	212	385	1700	0.498	846	1152	0.7	1.0	4.207	A
3 - A22 (West)	1178	294	150	2637	0.447	1177	1081	0.6	0.8	2.465	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	832	208	1050	1890	0.440	831	574	0.5	0.8	3.397	A
2 - A22 (South)	1037	259	472	1647	0.630	1034	1410	1.0	1.7	5.852	A
3 - A22 (West)	1442	361	183	2611	0.552	1441	1323	0.8	1.2	3.071	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	832	208	1051	1889	0.441	832	575	0.8	0.8	3.405	A
2 - A22 (South)	1037	259	472	1646	0.630	1037	1411	1.7	1.7	5.909	A
3 - A22 (West)	1442	361	184	2611	0.552	1442	1326	1.2	1.2	3.079	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	680	170	860	2029	0.335	681	470	0.8	0.5	2.672	A
2 - A22 (South)	847	212	386	1700	0.498	850	1154	1.7	1.0	4.250	A
3 - A22 (West)	1178	294	151	2636	0.447	1179	1085	1.2	0.8	2.473	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	569	142	720	2132	0.267	570	393	0.5	0.4	2.306	A
2 - A22 (South)	709	177	323	1738	0.408	710	966	1.0	0.7	3.507	A
3 - A22 (West)	986	247	126	2655	0.372	987	908	0.8	0.6	2.161	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A22 (South)	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	0.59	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.50	0.05	0.48	1.29	1.40			N/A	N/A
2 - A22 (South)	0.98	0.07	0.79	1.81	2.48			N/A	N/A
3 - A22 (West)	0.80	0.07	0.76	1.20	1.69			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.78	0.03	0.25	0.78	0.78			N/A	N/A
2 - A22 (South)	1.67	0.03	0.26	1.67	1.67			N/A	N/A
3 - A22 (West)	1.22	0.03	0.26	1.22	1.22			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.78	0.03	0.28	0.78	2.69			N/A	N/A
2 - A22 (South)	1.69	0.03	0.26	1.69	1.69			N/A	N/A
3 - A22 (West)	1.23	0.03	0.26	1.23	1.23			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	1.00	0.16	1.00	1.40	1.74			N/A	N/A
3 - A22 (West)	0.81	0.55	1.00	1.40	1.45			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.37	0.00	0.00	0.37	0.37			N/A	N/A
2 - A22 (South)	0.69	0.06	0.67	1.26	1.26			N/A	N/A
3 - A22 (West)	0.59	0.12	0.86	1.37	1.44			N/A	N/A

2039 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A26 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2039 Baseline	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	699	100.000
2 - A22 (South)		ONE HOUR	✓	831	100.000
3 - A22 (West)		ONE HOUR	✓	1467	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	158	541
	2 - A22 (South)	80	0	751
	3 - A22 (West)	717	750	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.37	2.80	0.6	2.8	A	641	962
2 - A22 (South)	0.58	5.49	1.4	1.7	A	763	1144
3 - A22 (West)	0.60	3.37	1.5	2.6	A	1346	2019

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	526	132	563	2246	0.234	525	598	0.0	0.3	2.090	A
2 - A22 (South)	626	156	406	1687	0.371	623	682	0.0	0.6	3.377	A
3 - A22 (West)	1104	276	60	2704	0.408	1102	970	0.0	0.7	2.242	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	628	157	674	2166	0.290	628	716	0.3	0.4	2.341	A
2 - A22 (South)	747	187	486	1638	0.456	746	816	0.6	0.8	4.033	A
3 - A22 (West)	1319	330	72	2696	0.489	1318	1160	0.7	1.0	2.613	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	770	192	825	2055	0.374	769	876	0.4	0.6	2.797	A
2 - A22 (South)	915	229	595	1570	0.583	913	998	0.8	1.4	5.455	A
3 - A22 (West)	1615	404	88	2683	0.602	1613	1420	1.0	1.5	3.356	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	770	192	826	2054	0.375	770	877	0.6	0.6	2.801	A
2 - A22 (South)	915	229	596	1570	0.583	915	1000	1.4	1.4	5.494	A
3 - A22 (West)	1615	404	88	2683	0.602	1615	1422	1.5	1.5	3.369	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	628	157	675	2164	0.290	629	718	0.6	0.4	2.345	A
2 - A22 (South)	747	187	487	1637	0.456	749	818	1.4	0.8	4.063	A
3 - A22 (West)	1319	330	72	2695	0.489	1321	1164	1.5	1.0	2.623	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	526	132	565	2245	0.234	527	601	0.4	0.3	2.096	A
2 - A22 (South)	626	156	408	1686	0.371	627	684	0.8	0.6	3.399	A
3 - A22 (West)	1104	276	60	2704	0.408	1106	974	1.0	0.7	2.254	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - A22 (South)	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	0.69	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2 - A22 (South)	0.83	0.08	0.81	1.20	1.68			N/A	N/A
3 - A22 (West)	0.95	0.06	0.69	1.85	2.61			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.60	0.03	0.25	0.60	0.60			N/A	N/A
2 - A22 (South)	1.38	0.03	0.26	1.38	1.38			N/A	N/A
3 - A22 (West)	1.50	0.03	0.26	1.50	1.50			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.60	0.03	0.30	1.36	2.80			N/A	N/A
2 - A22 (South)	1.39	0.03	0.27	1.39	1.39			N/A	N/A
3 - A22 (West)	1.51	0.03	0.26	1.51	1.51			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2 - A22 (South)	0.85	0.24	0.96	1.42	1.47			N/A	N/A
3 - A22 (West)	0.96	0.54	1.01	1.42	1.48			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - A22 (South)	0.59	0.06	0.64	1.34	1.42			N/A	N/A
3 - A22 (West)	0.69	0.12	0.87	1.38	1.44			N/A	N/A

2039 with Downlands Farm, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A26 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2039 with Downlands Farm	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	784	100.000
2 - A22 (South)		ONE HOUR	✓	938	100.000
3 - A22 (West)		ONE HOUR	✓	1280	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	360	424
	2 - A22 (South)	216	0	722
	3 - A22 (West)	341	939	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.45	3.46	0.8	2.5	A	719	1079
2 - A22 (South)	0.63	5.83	1.7	2.4	A	861	1291
3 - A22 (West)	0.55	3.10	1.2	1.6	A	1175	1762

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	590	148	705	2143	0.275	589	418	0.0	0.4	2.315	A
2 - A22 (South)	706	177	318	1742	0.406	703	976	0.0	0.7	3.459	A
3 - A22 (West)	964	241	162	2628	0.367	961	860	0.0	0.6	2.158	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	705	176	844	2041	0.345	704	500	0.4	0.5	2.690	A
2 - A22 (South)	843	211	381	1703	0.495	842	1167	0.7	1.0	4.176	A
3 - A22 (West)	1151	288	194	2603	0.442	1150	1029	0.6	0.8	2.475	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	863	216	1033	1903	0.454	862	612	0.5	0.8	3.456	A
2 - A22 (South)	1033	258	466	1650	0.626	1030	1428	1.0	1.6	5.780	A
3 - A22 (West)	1409	352	237	2571	0.548	1408	1259	0.8	1.2	3.091	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	863	216	1034	1902	0.454	863	613	0.8	0.8	3.464	A
2 - A22 (South)	1033	258	467	1650	0.626	1033	1430	1.6	1.7	5.834	A
3 - A22 (West)	1409	352	238	2570	0.548	1409	1262	1.2	1.2	3.099	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	705	176	845	2040	0.345	706	502	0.8	0.5	2.700	A
2 - A22 (South)	843	211	382	1702	0.495	846	1170	1.7	1.0	4.218	A
3 - A22 (West)	1151	288	195	2603	0.442	1152	1033	1.2	0.8	2.486	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	590	148	708	2141	0.276	591	420	0.5	0.4	2.323	A
2 - A22 (South)	706	177	320	1741	0.406	707	979	1.0	0.7	3.489	A
3 - A22 (West)	964	241	163	2627	0.367	965	864	0.8	0.6	2.166	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2 - A22 (South)	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	0.58	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.52	0.06	0.61	1.32	1.41			N/A	N/A
2 - A22 (South)	0.97	0.07	0.80	1.78	2.40			N/A	N/A
3 - A22 (West)	0.79	0.07	0.76	1.08	1.61			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.82	0.03	0.25	0.82	0.82			N/A	N/A
2 - A22 (South)	1.65	0.03	0.26	1.65	1.65			N/A	N/A
3 - A22 (West)	1.20	0.03	0.26	1.20	1.20			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.83	0.03	0.28	0.83	2.47			N/A	N/A
2 - A22 (South)	1.66	0.03	0.26	1.66	1.66			N/A	N/A
3 - A22 (West)	1.21	0.03	0.26	1.21	1.21			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	0.99	0.17	1.00	1.34	1.71			N/A	N/A
3 - A22 (West)	0.80	0.55	1.00	1.40	1.45			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2 - A22 (South)	0.69	0.06	0.67	1.16	1.16			N/A	N/A
3 - A22 (West)	0.58	0.11	0.85	1.37	1.43			N/A	N/A

2039 with Downlands Farm, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A26 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Downlands Farm	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	717	100.000
2 - A22 (South)		ONE HOUR	✓	837	100.000
3 - A22 (West)		ONE HOUR	✓	1463	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	154	563
	2 - A22 (South)	88	0	749
	3 - A22 (West)	709	754	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.38	2.85	0.6	2.9	A	658	987
2 - A22 (South)	0.59	5.68	1.4	1.8	A	768	1152
3 - A22 (West)	0.60	3.38	1.5	2.6	A	1342	2014

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	540	135	566	2244	0.241	539	598	0.0	0.3	2.110	A
2 - A22 (South)	630	158	423	1677	0.376	628	682	0.0	0.6	3.424	A
3 - A22 (West)	1101	275	66	2700	0.408	1099	985	0.0	0.7	2.244	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	645	161	677	2163	0.298	644	716	0.3	0.4	2.370	A
2 - A22 (South)	752	188	506	1626	0.463	751	816	0.6	0.9	4.112	A
3 - A22 (West)	1315	329	79	2690	0.489	1314	1178	0.7	1.0	2.616	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	789	197	829	2052	0.385	789	876	0.4	0.6	2.848	A
2 - A22 (South)	922	230	619	1555	0.592	919	998	0.9	1.4	5.638	A
3 - A22 (West)	1611	403	97	2677	0.602	1609	1442	1.0	1.5	3.363	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	789	197	830	2051	0.385	789	877	0.6	0.6	2.852	A
2 - A22 (South)	922	230	620	1555	0.593	922	1000	1.4	1.4	5.681	A
3 - A22 (West)	1611	403	97	2677	0.602	1611	1444	1.5	1.5	3.376	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	645	161	679	2162	0.298	645	718	0.6	0.4	2.374	A
2 - A22 (South)	752	188	507	1625	0.463	755	818	1.4	0.9	4.147	A
3 - A22 (West)	1315	329	79	2690	0.489	1317	1182	1.5	1.0	2.626	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	540	135	568	2243	0.241	540	601	0.4	0.3	2.114	A
2 - A22 (South)	630	158	424	1676	0.376	631	684	0.9	0.6	3.447	A
3 - A22 (West)	1101	275	66	2700	0.408	1103	989	1.0	0.7	2.256	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - A22 (South)	0.60	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	0.69	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.42	0.00	0.00	0.42	0.42			N/A	N/A
2 - A22 (South)	0.85	0.07	0.81	1.34	1.77			N/A	N/A
3 - A22 (West)	0.95	0.06	0.69	1.84	2.60			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.62	0.03	0.25	0.62	0.62			N/A	N/A
2 - A22 (South)	1.43	0.03	0.26	1.43	1.43			N/A	N/A
3 - A22 (West)	1.50	0.03	0.26	1.50	1.50			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.62	0.03	0.29	1.28	2.86			N/A	N/A
2 - A22 (South)	1.44	0.03	0.27	1.44	1.44			N/A	N/A
3 - A22 (West)	1.50	0.03	0.26	1.50	1.50			N/A	N/A

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.43	0.00	0.00	0.43	0.43			N/A	N/A
2 - A22 (South)	0.87	0.21	0.96	1.44	1.50			N/A	N/A
3 - A22 (West)	0.96	0.54	1.01	1.42	1.48			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - A22 (South)	0.61	0.06	0.64	1.34	1.43			N/A	N/A
3 - A22 (West)	0.69	0.12	0.87	1.38	1.44			N/A	N/A

2039 with All Developments, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A26 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 with All Developments	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	793	100.000
2 - A22 (South)		ONE HOUR	✓	941	100.000
3 - A22 (West)		ONE HOUR	✓	1280	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	361	432
	2 - A22 (South)	227	0	714
	3 - A22 (West)	324	956	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.46	3.54	0.9	2.3	A	728	1092
2 - A22 (South)	0.63	5.92	1.7	2.5	A	863	1295
3 - A22 (West)	0.55	3.12	1.2	1.6	A	1175	1762

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	597	149	718	2133	0.280	595	414	0.0	0.4	2.339	A
2 - A22 (South)	708	177	324	1738	0.408	706	989	0.0	0.7	3.480	A
3 - A22 (West)	964	241	170	2621	0.368	961	860	0.0	0.6	2.166	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	713	178	859	2030	0.351	712	495	0.4	0.5	2.730	A
2 - A22 (South)	846	211	388	1698	0.498	845	1183	0.7	1.0	4.210	A
3 - A22 (West)	1151	288	204	2596	0.443	1150	1029	0.6	0.8	2.488	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	873	218	1051	1889	0.462	872	606	0.5	0.9	3.533	A
2 - A22 (South)	1036	259	475	1645	0.630	1033	1448	1.0	1.7	5.861	A
3 - A22 (West)	1409	352	249	2562	0.550	1408	1259	0.8	1.2	3.115	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	873	218	1053	1888	0.462	873	607	0.9	0.9	3.545	A
2 - A22 (South)	1036	259	476	1644	0.630	1036	1450	1.7	1.7	5.918	A
3 - A22 (West)	1409	352	250	2561	0.550	1409	1262	1.2	1.2	3.124	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	713	178	861	2029	0.351	714	496	0.9	0.5	2.742	A
2 - A22 (South)	846	211	389	1698	0.498	849	1186	1.7	1.0	4.254	A
3 - A22 (West)	1151	288	205	2595	0.443	1152	1033	1.2	0.8	2.499	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	597	149	720	2131	0.280	598	415	0.5	0.4	2.347	A
2 - A22 (South)	708	177	326	1737	0.408	710	992	1.0	0.7	3.507	A
3 - A22 (West)	964	241	171	2621	0.368	965	864	0.8	0.6	2.174	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.39	0.00	0.00	0.39	0.39			N/A	N/A
2 - A22 (South)	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	0.58	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.54	0.06	0.65	1.33	1.42			N/A	N/A
2 - A22 (South)	0.98	0.07	0.79	1.81	2.48			N/A	N/A
3 - A22 (West)	0.79	0.07	0.76	1.12	1.63			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.85	0.03	0.25	0.85	0.85			N/A	N/A
2 - A22 (South)	1.67	0.03	0.26	1.67	1.67			N/A	N/A
3 - A22 (West)	1.21	0.03	0.26	1.21	1.21			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.86	0.03	0.27	0.86	2.34			N/A	N/A
2 - A22 (South)	1.69	0.03	0.26	1.69	1.69			N/A	N/A
3 - A22 (West)	1.22	0.03	0.26	1.22	1.22			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.54	0.54	1.00	1.40	1.45			N/A	N/A
2 - A22 (South)	1.00	0.16	1.00	1.40	1.74			N/A	N/A
3 - A22 (West)	0.80	0.55	1.00	1.40	1.45			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.39	0.00	0.00	0.39	0.39			N/A	N/A
2 - A22 (South)	0.69	0.06	0.67	1.26	1.26			N/A	N/A
3 - A22 (West)	0.58	0.11	0.84	1.37	1.43			N/A	N/A

2039 with All Developments, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A26 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A22 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	3.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 with All Developments	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A26		ONE HOUR	✓	715	100.000
2 - A22 (South)		ONE HOUR	✓	828	100.000
3 - A22 (West)		ONE HOUR	✓	1473	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	151	564
	2 - A22 (South)	81	0	747
	3 - A22 (West)	722	751	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A26	2 - A22 (South)	3 - A22 (West)
From	1 - A26	0	0	0
	2 - A22 (South)	0	0	0
	3 - A22 (West)	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A26	0.38	2.84	0.6	2.9	A	656	984
2 - A22 (South)	0.59	5.60	1.4	1.7	A	760	1140
3 - A22 (West)	0.60	3.39	1.5	2.7	A	1352	2027

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	538	135	564	2246	0.240	537	603	0.0	0.3	2.106	A
2 - A22 (South)	623	156	424	1676	0.372	621	677	0.0	0.6	3.404	A
3 - A22 (West)	1109	277	61	2704	0.410	1106	984	0.0	0.7	2.249	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	643	161	675	2165	0.297	642	721	0.3	0.4	2.364	A
2 - A22 (South)	744	186	507	1625	0.458	743	810	0.6	0.8	4.079	A
3 - A22 (West)	1324	331	73	2695	0.491	1323	1177	0.7	1.0	2.621	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	787	197	826	2054	0.383	786	883	0.4	0.6	2.838	A
2 - A22 (South)	912	228	620	1555	0.586	909	992	0.8	1.4	5.559	A
3 - A22 (West)	1622	405	89	2683	0.605	1620	1441	1.0	1.5	3.379	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	787	197	827	2054	0.383	787	884	0.6	0.6	2.842	A
2 - A22 (South)	912	228	621	1554	0.586	912	993	1.4	1.4	5.600	A
3 - A22 (West)	1622	405	89	2682	0.605	1622	1443	1.5	1.5	3.393	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	643	161	676	2164	0.297	644	723	0.6	0.4	2.370	A
2 - A22 (South)	744	186	508	1624	0.458	747	812	1.4	0.9	4.112	A
3 - A22 (West)	1324	331	73	2695	0.491	1326	1181	1.5	1.0	2.634	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A26	538	135	566	2244	0.240	539	605	0.4	0.3	2.112	A
2 - A22 (South)	623	156	425	1676	0.372	624	680	0.9	0.6	3.427	A
3 - A22 (West)	1109	277	61	2704	0.410	1110	988	1.0	0.7	2.262	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - A22 (South)	0.59	0.55	1.00	1.40	1.45			N/A	N/A
3 - A22 (West)	0.69	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.42	0.00	0.00	0.42	0.42			N/A	N/A
2 - A22 (South)	0.84	0.08	0.81	1.25	1.70			N/A	N/A
3 - A22 (West)	0.96	0.06	0.68	1.87	2.66			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.62	0.03	0.25	0.62	0.62			N/A	N/A
2 - A22 (South)	1.40	0.03	0.26	1.40	1.40			N/A	N/A
3 - A22 (West)	1.51	0.03	0.26	1.51	1.51			N/A	N/A

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.62	0.03	0.29	1.29	2.85			N/A	N/A
2 - A22 (South)	1.41	0.03	0.27	1.41	1.41			N/A	N/A
3 - A22 (West)	1.52	0.03	0.26	1.52	1.52			N/A	N/A

17:30 - 17:45

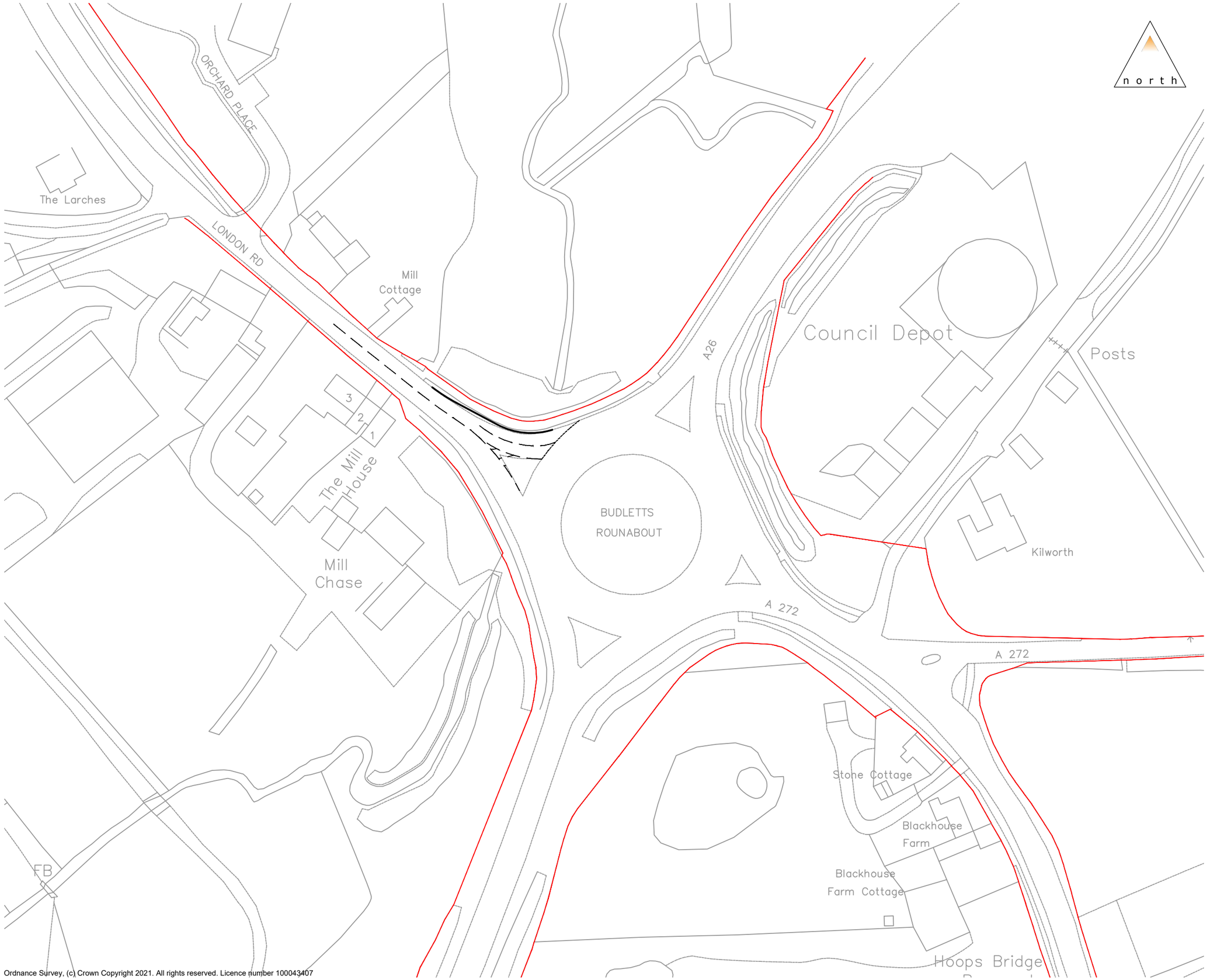
Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.42	0.00	0.00	0.42	0.42			N/A	N/A
2 - A22 (South)	0.85	0.22	0.95	1.42	1.48			N/A	N/A
3 - A22 (West)	0.97	0.54	1.01	1.43	1.48			N/A	N/A

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - A26	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - A22 (South)	0.60	0.06	0.63	1.34	1.43			N/A	N/A
3 - A22 (West)	0.70	0.12	0.87	1.38	1.44			N/A	N/A

Appendix L

Illustrative Highway Mitigation Schemes



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Legend

Highway Boundary

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Project:
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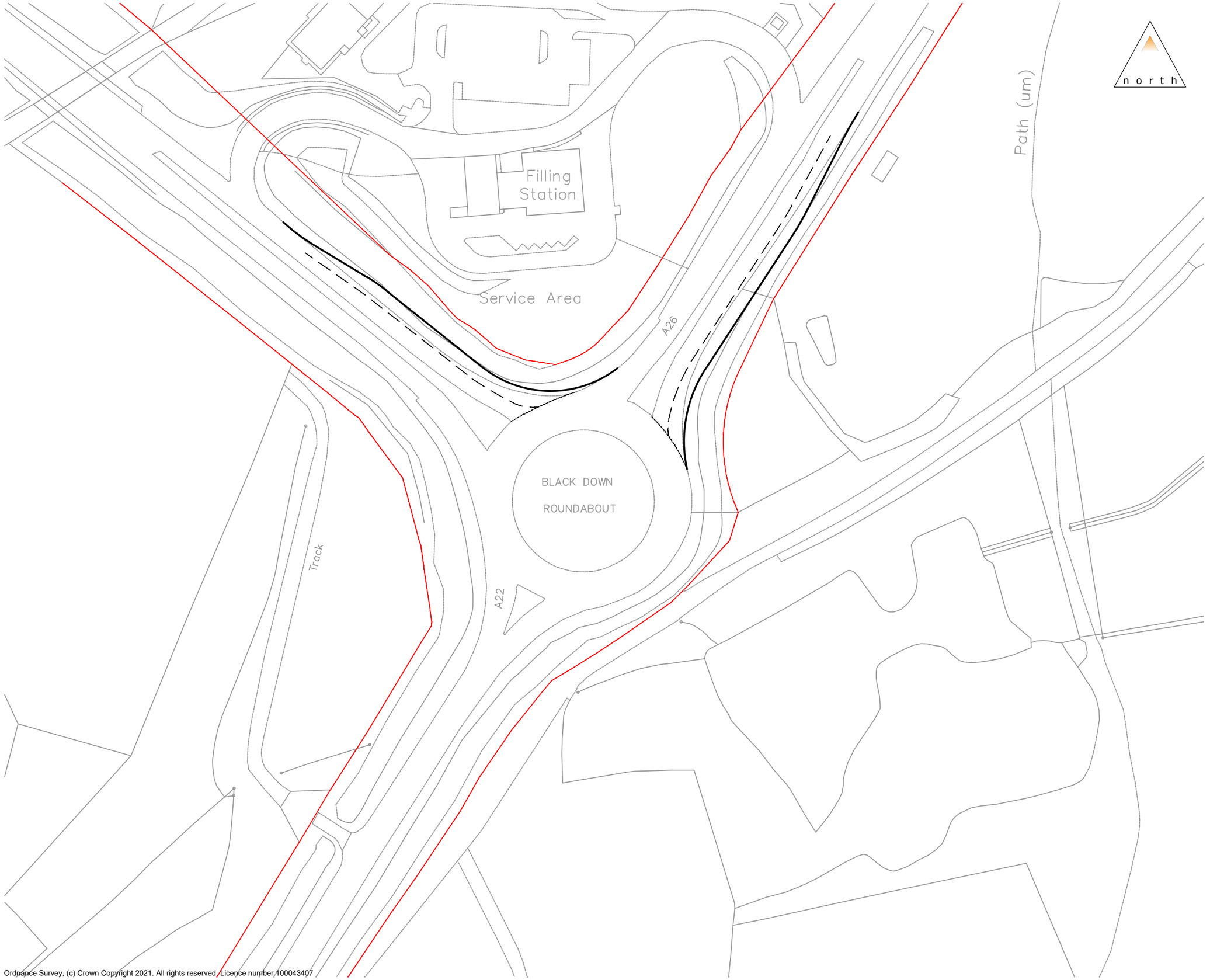
Title:
Illustrative Mitigation Works
Budletts Roundabout

Scale: 1:1,000 (@ A3)

Drawing: 2001061-SK18

Revision: -

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Legend

Highway Boundary

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Project:
Downlands Farm, Uckfield

Title:
Illustrative Mitigation Works
Black Down Roundabout

Scale: 1:1,000 (@ A3)

Drawing: 2001061-SK19

Revision: -

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