



CSM Active
Velo Birmingham & Midlands 2019

**Route Risk Assessment &
Management Methodology**
V2 – 08 April 2019

Sunday 12 May 2019

Author: [REDACTED]

Contents

Contents	1
Introduction	2
100 Mile Route	2
42 Mile Route	2
Turn by Turn Risk Assessment – General Principles & Assumptions.....	3
13.9 Miles – Short Route 1 (Nether Whitacre)	4
29.9 Miles – Short Route 2 (Fillongley)	6
42.5 – 43.5 Miles – Coventry City Centre	8
44.7 Miles – Spon End Level Crossing	9
70.2 Miles – Four Ashes Road Access Lane	10
89.2 Miles – Hollymoor Ambulance Hub	12
98.6 Miles - Lordswood Road Crossing	16
Vehicle Crossing Points	18
Cut-Off Locations	19

Introduction

The Vélo brand is a series of major closed road cycling events, delivered by CSM Active. The inaugural Vélo launched in 2017 with Vélo Birmingham when 15,000 riders took part in a 100-mile sportive. The 2nd edition of Vélo Birmingham & Midlands is set to become one of the most eagerly anticipated events on the cycling calendar, combining 100 miles of closed roads and a picturesque yet challenging new route resulting in an iconic event which will encourage 15,000 cyclists to travel to the area to participate, with the ultimate aim of delivering a successful event which can return annually. The event will be open to anyone who wishes to enter (over the age of 16) & is delivered by CSM Active.

The purpose of this document is to provide detail on the methodology of how unique challenges on the event route will be managed and risk mitigated to an acceptable level. The content within this document and proposed management & mitigations at all locations have been discussed with, and approved by the event director of Velo Birmingham & Midlands, an employee of CSM Active Ltd.

Key Route Data

100 Mile Route

- Exact Distance – 101.6 miles / 163.5 kilometres
- Total Elevation Gain – 4,774 feet / 1,455 metres

42 Mile Route

- Exact Distance – 43.2 miles / 69.5 kilometres
- Total Elevation Gain – 1,821 feet / 555 metres

Turn by Turn Risk Assessment – General Principles & Assumptions

The turn by turn risk assessment document provides an opportunity to risk assess each specific point of risk on the event route, to assist with ensuring suitable mitigations are installed at each location there is a deemed a risk. It is important to note that this turn risk assessment is based on the roads being fully closed and free from any non-event traffic unless specifically stated within this document and the turn-by-turn. As is the norm for closed road sporting events, to ensure the roads are fully closed and secured, the event route is split up in to 9x sectors, with the following stewarding & security companies responsible for the following sectors:

- Sector 1 & 2 – Show & Event
- Sector 3 & 4 – SaITM
- Sector 5 & 6 – Expedient Security
- Sector 7 & 8 – Security & Event Solutions
- Sector 9 – MJ Events

Road Traffic Solutions (RTS) will provide traffic management services across the whole 100-mile event route and will be responsible for the installation and checks of all traffic management, as well as delivering the reopening of the roads as agreed following passage of the final sweep vehicle.

There are a series of pre-agreed crossing of the event route for local communities that will be available for use prior to the passage of the first rider and following the passage of the final sweep vehicle to ensure vehicular access is extended, wherever possible.

A comprehensive business and resident communications plan is being delivered by CSM Active which gives prior notice about the road closures for the event to all those affected. As well as advance communication by telephone and email to all businesses and organisations on the event route, two letters will be distributed to around 700,000 addresses in the region that are impacted or within close proximity to the event route. Relevant local authorities, emergency services and other key stakeholders have all been engaged with from event conception and have been involved in the detailed event planning process for the event.

There will be in the region of 60x moto marshals working on the event, provided by an independent company that provide moto marshals for events of a similar nature across the length and breadth of the country. These moto marshals will be primarily responsible for delivering pre-agreed managed access plans for people who genuinely require access, such as care providers, local residents and business owners and employees. They will also assist with blue-light response vehicles that require access to the event route where possible. Moto marshals will also facilitate ad-hoc access, when deemed safe to do so, in line with their operational plan.

13.9 Miles – Short Route 1 (Nether Whitacre)

Short Route 1 is a 3.2mile long diversion, which comes at just 13.9 miles into the Velo Birmingham & Midlands event route. The diversion starts at Nether Whitacre, and turns right off the 100-mile event route off Deep Lane and onto the Coventry Road (B4098). It then continues on the Coventry Road (B4098) until it's junction with Nuneaton Road (B4114), where it then turns right to continue on Tamworth Road (B4098) it re-joins with the 100-mile route as it turns off Devitts Green Lane.

This route is known as 'Short Route 1' and will only be used by participants that arrive in Nether Whitacre, after 09:30, which is slower than the minimum required speed communicated to participants in order to ensure we can reopen roads within the publicised road closure timings.

By using this diversion route – the distance covered by participants will be reduced by approximately 10.5 miles / 17 kilometres and the elevation gain by around 390 feet / 119 metres.

Key Timings

Time	Activity
05:30	Roads closed at Nether Whitacre (main event route)
07:02	First rider expected at Nether Whitacre
09:30	Last rider expected at Nether Whitacre. Participants arriving at Nether Whitacre AFTER this time will be directed onto Short Route 1.
10:30	Cut-off enforced at Nether Whitacre, any remaining riders (only possible if quantities are small) transported by sweep team to short route 2 (Fillongley) to continue.
11:30	Roads reopened at Nether Whitacre (main event route)

Management Methodology

It is anticipated that short route 1 will only be used by a very small number of riders due to how early this falls within the event route and the profile of the event route to this point. This short route directs riders onto open roads, and therefore measures will be put in place to ensure associated risks have suitable mitigations in place. These measures and associated considerations are set out below:

- The section of route being used is closed at either end to facilitate the 100-mile event route, meaning there will be no access onto this for through-traffic and can only be accessed by local traffic;
- Regulation size yellow & black 'CAUTION CYCLE EVENT' signage will be installed on event morning at each junction that joins short route 1 and directional arrows will be in place at regular intervals;
- Two event sweep teams and one route team will be situated at the start of the short route in Nether Whitacre;
- At 09:30 and upon the passage of the pace car on the 100-mile event route, the route team/sweep team will change the event signage to direct riders to turn right onto the short route, instead of turning left to continue on the 100-mile route and install barriers across the 100-mile route to direct all riders onto Short Route 1.

- The first sweep team will then depart and lead the first cyclists along the short route, while the second sweep vehicle will remain in place and brief riders as they enter the short route with the following key message - ***“You are now entering a live road. Please obey the highway code”***;
- At 10:30, as long as the quantity of riders allows for it, the second sweep team will pick up any riders still passing through this location, and transport them to short route 2 in Fillongley where riders can continue. They will then provide sweep of the short route acting as a final vehicle, reporting to event control once they have re-joined the 100-mile route.

Contingency Options

As part of the event contingency plans, short route 1 is included within the event traffic order for full closure and traffic management equipment will be pre-dropped at the 11x junctions on the route in order to facilitate a closure at short notice if required.

In order to keep the tail end of the event on schedule in case of a delay to the start of the event, short route 1 offers a contingency route that could be implemented at 09:30 to divert all riders to Fillongley. This would gain back 75 minutes for the tail end of the event.

The stewarding company responsible for this section of route (Show & Event) will be briefed appropriately and a redeployment plan will be included within their planning which utilises their welfare stewards and response teams to cover the 11x closure points. If this contingency route is required to be used as a full closure, then a crossing of the route for local vehicles will be managed between Coleshill Rd & Atherstone Rd.

Due to the distance into the event route that this short route comes at, it is likely that we would only require implementing the closure of this in the following instances:

- Adverse weather which is not bad enough to stop the event, but significant enough to raise concerns around how realistic the advertised minimum speeds are and the welfare of participants over the full 100 mile event route which consequently raises concerns over whether the pre-advertised road reopening times can be delivered upon;
- Major incident on the event route prior to the start of the event; or
- Major incident during the event, causing significant delays. It should be noted however that this would need to occur early in the event for this to be a feasible alternative for use.

29.9 Miles – Short Route 2 (Fillongley)

Short Route 2 is a 1.4-mile long diversion, which comes at 29.9 miles into the Velo Birmingham & Midlands event route. The diversion starts at the main crossroads in Fillongley, by turning right off the 42-mile & 100-mile event route onto Meriden Rd (B4102) before rejoining with the event route by continuing straight on the Meriden Rd (B4102) at Chapel Green as the 100-mile route joins from the left out of Wall Hill Rd.

This route is known as ‘Short Route 2’ and will operate in three phases – closed, optional or mandatory, the timings for which are shown in the table below. Short route 2 will become mandatory when at 10:45, when the last rider is expected to pass Fillongley at the advertised minimum speed, meaning riders slower than this will be required to use short route 2. The minimum speed is enforced to ensure we can reopen roads within the publicised road closure timings.

By using this diversion route – the distance covered by participants will be reduced by approximately 19.2 miles / 30.9 kilometres and elevation gain will be reduced by around 721 feet / 220 metres.

Key Timings

Time	Activity
05:30	Road closures installed (Fillongley, Sector 3)
07:00	Road closures installed (Chapel Green, Sector & Short Route itself)
07:00 – 09:30	Local access maintained in both directions between Coventry Rd & Green End Rd via Meriden Rd with traffic managed in single lane at Fillongley crossroads with participants using other side of junction (see image).
07:39	First rider expected at Fillongley
09:30 – 12:00	Managed local access maintained between Ousterne Ln and Green End Rd (430 metres) for duration that riders are using short route 2 in three phased plan (see below), with stewards operating stop & hold.
09:45	Short Route 2 becomes optional
10:45	Last rider expected at Fillongley based on advertised minimum speed.
10:45	Short Route 2 becomes mandatory
12:30	Roads Reopened (Fillongley, Sector 3)
14:45	Roads Reopened (Chapel Green, Sector 5 & Short Route 2 itself)

Management Methodology

It is anticipated that short route 2 will only be used by a small number of riders due to how early this falls within the event route, however the enforcement of this short route is important at this early stage to catch as many riders as possible that are behind time at this stage to help mitigate against issues with tail-end management later in the event. In order to manage this location safely and communicate the short route effectively, the following steps will be taken by CSM Active:

- Two event sweep teams & one route team will be situated at the start of the short route in Fillongley and will be tasked with managing the implementation of the short route;
- At 09:30 the local access traffic management from Fillongley onto Green End Rd will be amended to divert all traffic along Ousterne Lane, with stewards in position at the top of Ousterne Ln ready to manage the stop & hold to maintain managed vehicle access across the short route in both directions.
- At 09:45 the route team/sweep team will install signage to communicate that a short route is available. The junction layout will also be amended to allow riders who want to, to turn right onto short route 2.
- At 09:45, the first sweep team will also depart from Fillongley along short route 2 ahead of the first rider and communicate with each steward & traffic management team that the first riders are expected. They will also be responsible for reconfiguring the junction at Chapel Green to move riders to the right hand side and keep the 100-mile route on the left at this junction to allow for a safe merging of riders from both directions as per the phased layout plans.
- At 10:45 and upon the passage of the pace car for the 100-mile event, the second sweep team/route team will remove the short route optional event signage that was installed and amend course directional signage to direct ALL riders right on to short route 2. The barriers pre-stacked at this junction should also be utilised to create a solid outside barrier line to direct all participants right onto the short route;
- Once the final sweep vehicle has passed through, the second sweep team will move along short route 2 as a final vehicle and reporting to event control once they have re-joined the 100-mile route at Chapel Green.

IMPORTANT: 42-Mile Management

It should be noted that the final rider of the 42-mile event based on a minimum speed of 9mph / 14.5kph is scheduled to pass the junction of short route 2 at 10:29. Therefore, any 42-mile riders presenting at the junction (defined by BLUE bib numbers) after 10:45 (when the short route becomes optional for the 100-mile riders), should be allowed to continue on the full route through to the finish line in Coventry. It is imperative that they are not pushed right onto short route 2.

Contingency Options

As part of the event contingency plans, short route 2 is included as an optional diversion route for the full event that is available to be used in the event of significant delay or major incident. In this instance, a dynamic decision of its use will be made within the event control room including all key stakeholders and access across the event route between Ousterne Lane and Green End Ln will not be facilitated. Instead traffic will be directed either onto the A45 at Allesley, or the M6 at the Ricoh Arena in Coventry.

In the case of adverse weather, Short Route 2 (Fillongley) could be used to shorten the event from 100 miles to 82 miles. If this was the case, the timing model shows that the first riders would reach all locations on the return route between 45 – 60 minutes after road closures are due to be installed. In this instance, a short delay to the start of 15 – 30 minutes may be considered to allow more time for checks to the event route to ensure it has been set up and secured. This would however need to be considered based on the weather and welfare of participants who would be arriving at the start line and waiting for the start.

42.5 – 43.5 Miles – Coventry City Centre

Coventry City Centre will play a major role in hosting the 2019 Velo Birmingham & Midlands event at the request of the local authority. Not only will the event route pass through the historic centre of the city, but this will also be the end of the 42-mile route for those participants choosing to take on this distance.

The 100-mile route through Coventry City Centre utilises a narrow section of route right through the heart of the city's iconic attractions and passing the High St, Cathedral & St Mary's Guildhall.

Key Timings

Time	Activity
06:30	Road closures installed (Priory St closure installed at 16:00 Saturday 11 May)
08:09	First 100-mile rider expected in Coventry City Centre
08:52	First 42-mile finisher expected
11:58	Last 42-mile finisher expected
12:17	Last 100-mile rider time based on advertised minimum speed
13:30	Roads reopened (Fairfax & Priory St reopened @ 18:00 Sunday 12 May)

Management Methodology

In order to facilitate a safe event route through Coventry City Centre, a consistent 3-metre width of route, defined by crowd control barrier, will be created between the junction of High St/Much Park St, and Little Park St/New Union St junction. This section is approximately 700 metres in length. Due to the narrow nature of this section of the route, event vehicles travelling within the event (excluding motos) will be diverted via Much Park St and St Johns St onto Little Park St, rejoining the event route on New Union St. This diversion route will be clearly sign-posted using bright pink signs with black text.

To manage pedestrian flows across the event route during the peak density of the event, there will be 6x pedestrian crossing points managed by stewards within the barriered section of the route. To create regular gaps in the event to allow crossing points to safely operate, stewards at the Much Park St junction with Jordan Well will operate a stop & hold at regular intervals utilising tape & stop signs to hold the event for no longer than 60 seconds at a time. This will allow a gap to form between riders allowing pedestrian crossing points to open. It is important that participants are not held for longer than 60 seconds at a time to prevent a significant build up of riders and therefore creating an additional risk. At this stage of the event, riders will be passing through at a maximum density of 110 CPM (Cyclists Per Minute).

The detailed route management CAD plans show the layout of barriers and locations of event signage, crossing points and key pedestrian flows that will be maintained throughout the event.

44.7 Miles – Spon End Level Crossing

After passing through Coventry City Centre, the 100-mile participants will turn onto the city's ring road before turning onto Coundon Rd where they will pass over Spon End level crossing. The Spon End level-crossing lies on a local line between Coventry and Coventry Arena train stations. It has been confirmed by local transport providers (to confirm) that trains on a Sunday between these two stations depart at the following times:

- Coventry Station to Coventry Arena Station – relevant Sunday train departure times as follows:
 - 11:46
 - 13:39
- Coventry Arena Station to Coventry Station – relevant Sunday train departure times as follows:
 - 12:50
 - 14:25

These timings in the context of the key event timings can be seen in the table below:

Time	Activity
07:00	Road closures installed
08:12	First rider expected at Spon End level crossing
11:46	First train of the day departs Coventry Station
11:50	First train of the day expected to cross Spon End level crossing
12:28	Last rider expected at Spon End level crossing based on advertised minimum speed & enforcement of cut-off in Coventry City Centre
14:45	Roads reopened

Management Methodology

Based on the above timings, the level crossing will only be in operation once during the period of that the event will be passing. This will be 38 minutes prior to the end of the ride and therefore in the tail-end of the event affecting only the slower riders. Adjacent to the level crossing there is a tunnel, which is available for use when the level crossing is closed for passing trains and this will be utilised for the event during this short period.

There will be stewards allocated specifically to this location who will be instructed, when the level crossing is active, to adjust the cone line in place covering the junction to the tunnel, to instead change the position of the cones to direct riders to use the tunnel instead. The tunnel has a cobbled surface which will be appropriately signed as an 'uneven surface'.

70.2 Miles – Four Ashes Road Access Lane

Hogarth's Hotel, Four Ashes Golf Centre & Solihull Riding Club, submitted a request for access to be maintained throughout the event on Four Ashes Road. Both the Hogarth's Hotel & Solihull Riding Club claim to have long standing pre-booked events scheduled for Sunday 12 May 2019 and on that basis had requested that access be maintained throughout the event period.

With the significant impact that a full closure would have on this cluster of businesses and the ability they have to communicate specifically with their guests/customers, it is deemed appropriate to install a single lane of access between Widney Manor roundabout and Gate Lane. The below table summarises the key timings at this location on Sunday 12 May 2019.

Key Timings

Time	Activity
07:15	Road closures installed
07:15 – 08:15	Access for to businesses – no width restriction
08:15	Access for businesses – 2.5m width restriction commences / Centre cone line installation commences
09:12	First rider expected on Four Ashes Road
14:41	Last rider expected on Four Ashes Road
14:45	Centre cone line removal commences
15:15	Access for to businesses – no width restriction
16:45	Roads reopened

Management Methodology

In order for this access lane to operate safely, the following mitigations will be in place:

Traffic Management

- A central cone line will be installed for the full 1.5km length of the access lane with cone spacing at 10 metres intervals. These cones will be taped in key sections, including the first 100m of the access lane, and across a 30-metre section at each business access/egress junction;
- Access lane will be managed in southbound direction only to improve the efficiency and capacity of the access lane and remove any waiting for vehicles wanting to exit from any of the businesses;
- No right turn / left turn only signage will be included at each egress point into the access lane;
- A hard closure will be maintained at Widney Manor Rd/Widney Lane junction, with stewards only allowing access for vehicles heading to Widney Manor Cemetery, Hogarth's Hotel. Solihull Riding Club or Four Ashes Golf Centre.
- No right turn / left turn only signage will be in place from each driveway turning onto the route with tape joining cones to prevent vehicles exiting driveways from turning into the event lane.
- A traffic management team will remain on standby at this location all day.

Stewarding, Security & CSAS

- 1x supervisor in a vehicle will be responsible for managing this section and will be able to utilise the access lane to rotate through the area in a clockwise direction.
- 2x SIA qualified stewards will be in place at the Widney Manor Rd/Widney Ln access to maintain the road closure and allow access only for those vehicles that are heading to Widney Manor Cemetery, Hogarth's Hotel, Solihull Riding Club or Four Ashes Golf Centre.
- 1x CSAS qualified operative and 2x event stewards will be in place on the Widney Manor roundabout to ensure vehicles approaching the access lane move onto the right hand-side of the road and so vehicles exiting the cemetery all turn right to egress via Gate Lane.
- 1x event steward will be in position at the entrance/exit to Hogarth's Hotel to ensure all vehicles exiting turn right towards Gate Lane.
- 1x event steward will be in position at the entrance/exit to Solihull Riding Club to ensure all vehicles exiting turn right towards Gate Lane.
- 1x event steward will be in position at the entrance/exit to Four Ashes Golf Club to ensure all vehicles exiting turn right towards Gate Lane.

Event Signage & Participant Communications

- A participant booklet/rider guide is circulated to all participants pre-event and contains key messages of information across all aspects of the event. Within this, there is a section dedicated to 'Vehicle Access Lanes'. On the Velo Birmingham & Midlands event route there are a small number of vehicle access lanes where managed access is facilitated in particular instances and where feasible to do so. In this section, it explains the purposes of these lanes and that riders should pay attention to course signage and explicitly states 'do not use the access lanes at any time'.
- On approach to this particular access lane, event signage indicates 'Turn Ahead 100m', 'Turn Ahead 50m', 'Narrow' & 'Riders Keep Left'. Signs at 250 metre intervals will also be fixed at along the length of the access lane stating 'Riders Keep Left'.

Other Considerations

- Four Ashes Road falls 70.2 miles into the event route on a flat section of road. At this distance, the event has an anticipated rider spread of 5hrs 29mins (329 minutes).
- With the provision of an adequate width of vehicle access lane on the northbound lane in a southbound direction, the event route at this location will be narrowed to 3 metres. The route is narrowed to 3 metres much earlier in the route, at 43 miles within Coventry City Centre for a similar distance.
- As a significant part of the route design and feasibility process, a course capacity calculator is developed based on a set of assumptions that have been proven fair and reasonable through its use and analysis of post-event timing data in several similar events in the UK. This course capacity calculator is adapted and run through a sensitivity test whenever a significant narrowing of the event route is proposed prior to its approval. The capacity calculator shows that the anticipated CPM (Cyclists Per Minute) at this location will be an average of 51 throughout the day, with an expected CPM peak flow of 81. Even under the sensitivity test conditions, this road width at this stage of the event does not raise any capacity concerns.
- It should also be taken into account that it is a well-known concept that participants will naturally ride on the left side of the road on a closed road event as this is what they are subconsciously used to. Again, this is a concept that has been proven on several similar UK events over previous years.

89.2 Miles – Hollymoor Ambulance Hub

Hollymoor Ambulance Hub is one of only two major ambulance hubs for the West Midlands Ambulance Service within the City of Birmingham. The hub is fully operational 24/7 and on a regular Sunday would expect 60x ambulance movements in and out of the hub, and also have around 120x staff requiring access to and egress from the hub for shifts at various times throughout the day.

Key Timings

Time	Activity
08:15	Road closures installed
09:55	First rider
16:27	Last rider
18:00	Roads reopened

Management Methodology

Access Lane for non-blue light vehicles

The map shows the agreed access route (red arrows) into and out of the ambulance hub for all non-blue light vehicles that will be operated throughout the road closure period. This will be facilitated through the use of a separately coned, 300 metre vehicle access lane that will be operated in alternate directions by event stewards. This access lane will be located on Rubery Ln, between it's junction with Park Way & Hollymoor Way. In order to access this lane, vehicles will be required to access via the A38 & Park Way.

Blue Light Egress Route – Eastbound

- It is understood that a higher number of blue light responses from the Hollymoor Ambulance Hub require egress in an eastbound direction.
- CSM Active have assured the West Midlands Ambulance Service that vehicles requiring egress in an eastbound direction will be able to take their normal route which would be right out of Hollymoor Way, onto Tessall Lane and Frankley Beeches Rd, continuing straight where the event route turns left onto Hogg Lane and as shown on map.
- When using this route, ambulances are encouraged to travel on the right side of the road, as participants within closed road events still tend to naturally cycle on the left hand side of the road. Ambulances should proceed with caution as they would on any normal day, making use of their sirens and blue lights.

Blue Light Egress Route – Westbound

- On a regular day, a lower number of blue light response vehicles from the Hollymoor Ambulance Hub require to egress in a westbound direction.
- After detailed discussions with management staff from the Hollymoor Ambulance Hub, it has been agreed that ambulances travelling west on a blue light response will use the route shown on the map. Ambulances will turn left out of Hollymoor Way onto Rubery Lane, before exiting the route by continuing straight onto Cross Farms Lane.

- Ambulances will be encouraged to travel on the normal/correct side of the road, as participants within a closed road cycling event would also usually naturally cycle on their left. Ambulances should proceed with caution as they would on any normal day, making use of their sirens and blue lights.
- Stewards positioned on the summit of Cock Hill Ln (50m after it's junction with The Doweries), from Security & Event Solutions (SES), will operate a stop & hold of the ride when given warning by their colleagues at the junction of Hollymoor Way, or via event control. This stop and hold will be put into place with this use of stop signs and whistles. Participants will be released, once the ambulance has left the event route. This stop & hold is required to prevent a vehicle/cyclist conflict on the at the bottom of the Cock Hill Ln descent as the event route takes a ninety degree right hand turn, which would otherwise pose a serious risk of incident between them and oncoming blue-light vehicles. A steward will be based at the Rubery Ln/Cock Hill Ln junction that has visibility towards the approaching ambulance as well as the event participants and will wave the ambulance through if it is safe for them to proceed.

Stewarding & Security

- SES & CSM Active will arrange a specific meeting on site at the Hollymoor Ambulance Hub to meet with WMAS prior to the event to talk through the access plan & arrangements with the supervisor that will be responsible for managing this access plan during the event.
- The key locations as set out below will need to be on an exclusive radio channel so that messages of ambulance egress can be communicated and acted upon, in a critical time efficient manner.
 - Rubery Ln/Cock Hill Lane junction – Stewards with visibility of oncoming ambulance & event cyclists;
 - Cock Hill Ln/The Doweries (50m after on summit of climb) – Stewards managing the participant stop & hold;
 - Rubery Ln/Park Way junction – Stewards managing the western end of the two-way access into and out of the ambulance hub for non-emergency vehicles;
 - Rubery Ln/Hollymoor Way junction – Stewards managing the eastern end of the two-way access into and out of the ambulance hub for non-emergency vehicles; and
 - Frankley Beeches Rd/Hogg Ln – Stewards managing the release of blue light vehicles eastbound towards Birmingham City Centre.

Motos

- A moto from the events moto provider will provide a moto specific to this location on event morning to ensure the area is set up correctly and to check stewards are appropriately briefed.
- This moto should remain on site during the event to ensure the operation runs smoothly and to report any issues to event control.

Other Considerations

- The Hollymoor Ambulance Hub comes at 89.5 miles into the event route. At this distance, the event has an anticipated rider spread of 6hrs 27mins (387 minutes).
- At this stage of the event, CSM Active Ltd anticipates an average CPM (Cyclist per minute) flow rate of 43, with a 69 CPM peak flow. This is significantly lower than earlier stages in the event route and considering the road widths available on Rubery Ln, Tessall Lane and Frankley Beeches Rd, this should allow for a safe and efficient passage of a blue-light vehicle if under blue lights and proceeding with usual caution.
- A participant booklet/rider guide is circulated to all participants pre-event and contains key messages of information across all aspects of the event. Within this, there is a section dedicated to 'Emergency Vehicle Access'. Within this section it clearly states that "emergency vehicles always take priority across the entire event route..." and that they should "...expect emergency vehicles from any direction at any time and safely pull over to the side of the road to allow the vehicle to pass safely when required."



98.6 Miles - Lordswood Road Crossing

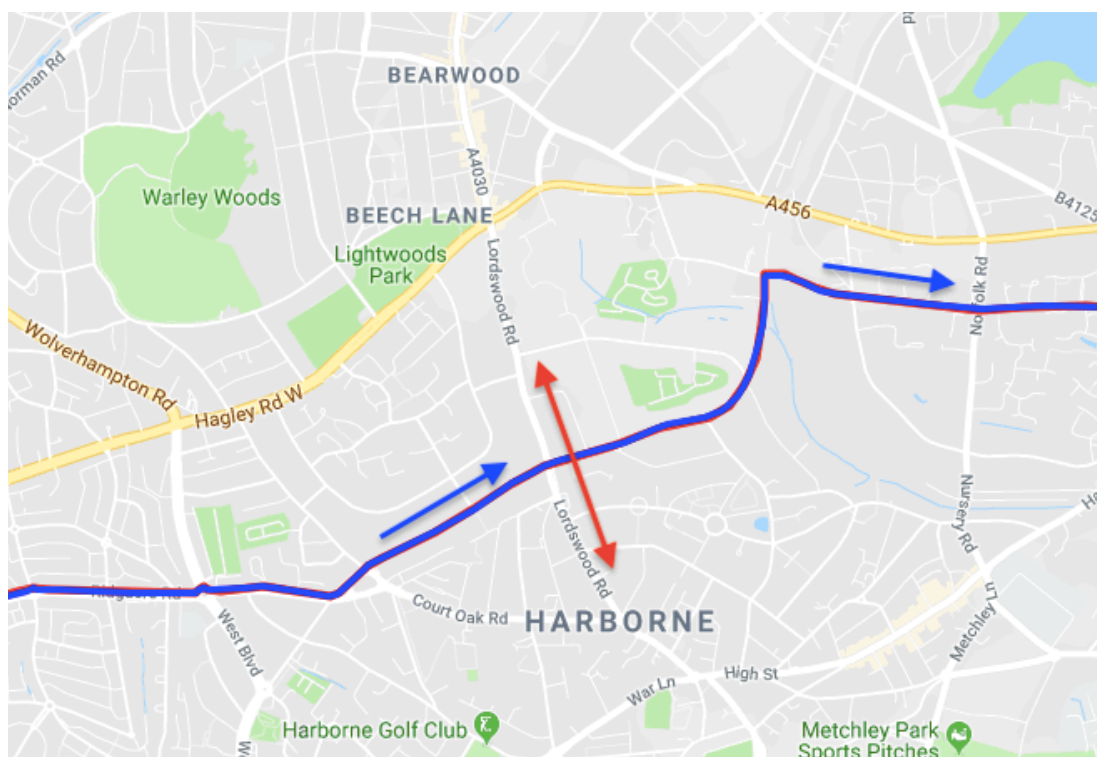
Due to the significant length of road closures in this section of the event route, a vehicle crossing point will be managed where participants and vehicles will be controlled by two-phase temporary traffic lights in order to facilitate local access across the event route. The vehicle crossing point will be located at the junction of Lordswood Rd & Croftdown Rd / Gillhurst Rd. This vehicle crossing point will not be made public to ensure it does not become overloaded on event day, however local bus services will be aware and will plan to utilise this crossing.

Key Timings

Time	Activity
08:15	Road closures installed
10:17	First rider
17:17	Last rider
19:00	Roads reopened

Lordswood Rd Vehicle Crossing Point

The red arrows on the map below shows the location of the vehicle crossing point, with the event route shown in blue.



Management Methodology

The Lordswood Rd vehicle crossing point comes at 98.5 miles into the 100-mile Velo Birmingham & Midlands event route. The crossing point will be managed by a combination of operatives from our Traffic Management Contractor, Road Traffic Solutions (RTS) & staff from our stewarding & security provider, MJ Events.

Traffic Management

- RTS will be responsible for manually operating the temporary traffic lights that they will be installing at the junction. The manual control of traffic lights will allow the lights to be dynamically phased with longer greens for vehicles and/or event participants, depending on the densities of each at different times throughout the day. These lights will be on consistent green for vehicles in either direction on Lordswood Rd prior to the first cyclist and immediately after the final cyclist, except for when advance event vehicles are required to cross.

Stewarding

- A stewarding & security team from MJ Events will be responsible for the security of the event route, and stopping, holding and releasing the participants on Croftdown Rd at this location.
- MJ events will operate the opening and closing of the vehicular traffic and event participants based on the changing of the temporary traffic lights – with RTS not changing the lights to any green phase unless they can clearly see that the previous phase of traffic are stopped and under control.
- With a 10-metre road width on Croftdown Rd, 10 metres of extendable turtlegate barrier will be dropped on event morning at this location to allow stewards to close a physical barrier in front of the event participants when the red lights are shown on the event route.
- A taped cone line taper will be in place on Croftdown Road to narrow cyclists down to use only the left (correct) side of the road. This will allow the stewards to have a narrower control point on the event route.
- It will also be important that, despite the TM layout, MJ event stewards prevent vehicles turning eastbound on to the event route on Gillhurst Rd when released on the relevant green traffic light phase.

Other Considerations

- At this stage of the event, the event participants will be spread over a 7-hour period (420 minutes). This means that the CPM (cyclists per minute) flow rate would be expected to average 40 across the day, with a likely peak of no more than 65 CPM.
- Based on the expected CPM rates, CSM Active require that participants are held for no more than 2 minutes (120 seconds) at a time, and that all stationary cyclists are allowed to move through the green phase before the red is shown and the next cycle of traffic light phasing commences. This will ensure participants do not become impatient and frustrated.
- A participant booklet/rider guide is circulated to all participants pre-event and contains key messages of information across all aspects of the event. Within this, there is a section dedicated specifically to the Lordswood Rd vehicle crossing point, making clear to participants that they may be asked to stop and wait for a short period.
- Relevant event signage will be in place in the lead up to the vehicle crossing point, including signage stating 'Prepare to Stop' & 'Caution, Vehicle Crossing Point'.

Vehicle Crossing Points

On the event route there are four types of vehicle crossing points. These are described below:

- **Pre & Post Event Vehicle Crossing Points** – These are predominantly access points for businesses and residents that may be landlocked due to the road closures. Here, traffic management will be set up to facilitate vehicle access/egress up to 20mins prior to the first participant and immediately after the passage of the final cyclist, but prior to the road reopening. For clarity, these are closed for the duration that the event is passing.
- **Traffic Light Managed Vehicle Crossing Point** – There are only one of these on the event route, which is located at Lordswood Road in Birmingham. See pages 16 & 17 of this document for further information.
- **Managed Vehicle Crossing Point** – These are at pre-agreed locations, usually with a key business or organisation (for example, Netherwood Ln into Baddesley Clinton National Trust) where a crossing is being managed on an ad hoc basis by a team of event stewards, but only when safe to do so. At these locations the event route allows for cyclists to be safely stopped and held by event stewards utilising stop signs, whistles and rope. Once cyclists are safely stopped and under control, vehicles may be allowed to cross.
- **Case-by-Case Vehicle Crossing Point** – For all other locations on the event route, the event steward has the right to enforce the closure on to the event route to secure the route for the participants. However if the steward deems it safe to do so, they are briefed to facilitate the safe crossing of vehicles where they see fit. This could be towards the tail end of the event where there are significant gaps between cyclists and vehicles only wish to cross straight over. It must be stressed however that this is entirely at the stewards discretion and they are well within their rights to not allow a vehicle to cross and instead to maintain the road closure.

Cut-Off Locations

As well as the two short routes as mentioned earlier in the document, in order to manage the tail end of the event and ensure the roads can be reopened on time, there will be three cut off points in place on the event route that have been communicated with riders in the event.

The three cut-off locations are listed below:

43 Miles / Cox St, Coventry City Centre – 12:00

At 12:00, barriers will be positioned across the road directing any riders that are still to arrive at this location into the 42-mile finish line in Coventry City Centre. Once riders have crossed the finish line, they will be directed to make their own way back to the finish venue in Birmingham by train. Due to the limited capacity of bicycles on trains between Coventry & Birmingham, a specialist bicycle transport operator, called Sherpa, will transport bikes to the finish venue. The Coventry City Centre production team will manage this cut off location.

79 Miles / Water & Toilet Stop @ Maypole Daisy Farm Recreation Ground – 15:30

A water & toilet stop at 79 miles will act as the second cut-off point on the 100-mile event route. This will be activated at 15:30, when the water & toilet station manager (assisted by a member of the route management team), will install a barrier line directing all riders into the welfare stop. From here a coach and/or minibus will transport participants with their bicycle in a van, back to the finish venue in Birmingham via the A435. It is anticipated that this journey time will be 20 minutes.

87 Miles / Rider Pit Stop @ Cofton Park Nursery – 16:15

The final rider pit stop at 87 miles will act at the third and final cut-off point on the 100-mile event route. This will be activated at 16:15 when the Rider Pit Stop manager (assisted by a member of the route management team), will install a barrier line directing all riders into the welfare stop. From here, a dynamic decision will be made as to the best option to transport participants back to the finish, and this will be based on the quantity that need to be dealt with and the minibus/coach capacity available at this location. The two options available are either:

- A coach and/or minibus will transport all participants, with their bicycle in a van, back to the finish venue in Birmingham via the A38. It is anticipated that this journey time will be 20 minutes.
- Participants will be shuttled the 1.6km to Longbridge Train Station which has trains every 10 minutes back into Five Ways & Birmingham New St, with participant bicycles transported by van.

The timings of these cut-off points may be dynamically changed on event day based on live timing point data being fed into event control from the 20, 42, 60 & 80 mile timing points, and an on the ground assessment of what quantity of participants are behind the minimum speed. Any decisions to implement delays will be made in consultation with the Event Director, Sweep Manager & Route Manager.

All participants will be able to receive a finisher's medal even if they have been withdrawn from the event at a cut-off point. They will either be given this by one of the sweep vehicles, or once they arrive at the finish venue by asking at the help desk.