

BRITISH TRIATHLON EVENT RISK ASSESSMENT



This risk assessment is complementary to and should be read in conjunction with Normal Operating Procedures, Emergency Action Plans and Event Management Plan

EVENT OVERVIEW

Event name **Mid Sussex Triathlon Club Tri Festival**

Event date(s) **25-Aug-19**

Risk assessment conducted by **Matthew Critchley** Risk assessment version control number **1**

Date of original risk assessment **01/05/2011** Date of last review **16/07/2019** Date of next review **16/07/2020**

Name of Organising Club/Organisation **Mid Sussex Triathlon Club**

Event Organiser/Race Director name **Matthew Critchley** Contact mobile **07887 800450**

Event Organiser/Race Director email address **matthew.s.critchley@gmail.com** Contact telephone **07887 800450**

Event Organiser/Race Director address (event permit will be posted here unless specified) **9 Royston Close, Three Bridges, Crawley, West Sussex** Postcode **RH10 8TN**

Safety Officer name **Paul Richardson**

Email address **paulrichardson100@gmail.com** Contact telephone **07733277519**

Event base/venue **Ardingly Reservoir** Postcode **RH17 6SQ**

Start area location **Ardingly Activity Centre** Finish area location (if different to start) **Ardingly Activity Centre Car Park**

Event start time (registration open) **00:00:00** Event finish time (event close) **00:00:00**

Local Authority: detail relevant authority where event base/venue is located	Contact name	Date notified	Response date
West Sussex County Council		16/07/2019	16/07/2019

Police Authority: detail all relevant authorities affected by the event (including cycle/run segments)	Contact name	Date notified	Response date
Sussex Police	David Jones	16/07/2019	16/07/2019

Highway Authority: detail all relevant authorities affected by cycle/run routes	Contact name	Date notified	Response date
West Sussex County Council	Mike Offley	16/07/2019	16/07/2019
Crawley Borough Council	Tony Bennetts	16/07/2019	16/07/2019
Mid Sussex Borough Council	Adam Jones	16/07/2019	16/07/2019

Detail(s) of other bodies (landowners, venue providers etc) where approval is required and received	Contact name	Date notified	Response date
South East Water	Chris Smith	16/07/2019	16/07/2019

RACES OVERVIEW

Applies to all races taking place as part of this event (use drop down options)

Swim type (if applicable) Adult cycle type (if applicable)

First race start time Last competitor finish time

Each race must be risk assessed in the appropriate tabs. Where different races use different routes (e.g. sprint, standard), the race must be indicated. Where different races deviate along the course, this must be identified and the differing routes identified and assessed.

List each race separately

	DISTANCES					
Race name	Swim	Cycle	Run	Run 2 (duathlon)	Number of competitors	Race start time
Sprint Triathlon	750m	23km	5km		25	09:00
Standard Distance Triathlon	1500m	40km	10km		35	09:00
Middle Distance Triathlon	1900m	80km	21.1km		15	07:00
Sprint Aquathlon	750m	23km	n/a		2	09:00
Standard Distance Aquathlon	1500m	40km	n/a		2	09:00
Middle Distance Aquathlon	1900m	80km	n/a		2	07:00

WHOLE EVENT RISK ASSESSMENT

Medical provider name	South Coast Ambulance Services	Medical provider contact telephone	999
Number of first aiders (min. 2)	2	Number of mobile/advanced responders	
Name of notified A&E hospital		Contact telephone	

Detail general risks and hazards that apply to the whole event

HAZARD IDENTIFICATION		Who is affected?	Risk Level	RISK MITIGATION	
Hazard/risk area	Description of hazard/risk	Competitors / Spectators / Marshals	High / Medium / Low	Description of controls to reduce the risk to as low as reasonably practicable	Who?
Medical provision	Inappropriately qualified first aid provision. Medical provider fails to attend event on time. Medical incident requiring action.	Competitors, spectators, marshals	Low	First aid trained staff on site. Although the site has poor mobile phone coverage, there is a landline from which emergency services can be contacted. The site EAP can be found here: <div style="text-align: center; margin: 10px 0;">  <p>I:\Sport\ Administration\ Triathlon\TriFest\</p> </div> British Triathlon Guide to Medical Cover at Events	Ardingly Centre Staff
Adverse weather	Event is undertaken in adverse/unsafe weather.	Competitors, spectators, marshals	Low	Weather forecast and warnings monitored. EAP details procedure in case of force majeure (modify/cancel). Notification of additional equipment or clothing required.	
Site build/derig	Accident or injury sustained during set up/derig.	Event team, general public	Low	Event team to follow manufacturer's instructions for items used in build/derig. Event team to wear appropriate PPE. Event crew to receive manual handling training. Event crew next of kin to be recorded and kept in event file in case of incident (refer to EAP).	
Registration	Congestion of competitors. Competitors not having appropriate insurance cover.	Competitors, marshals	Low	Low number of competitors with all entries online prior to event. There will be no entries on the Competitors to register at specific time detailed in pre-race communications. Marshals present to assist in creating one-way flow through the registration area. All competitors required to produce valid British Triathlon race licence or purchase day membership.	
Start/finish area	Spectator congestion, competitor overcrowding, dehydration or post-race medical incident.	Competitors, spectators, marshals	Low	Spectators to be separated from start/finish areas. Finish area sufficiently wide to enable sprint finish between competitors. Water available in post-race recovery area. Medical provision at finish line. Although there will not be paramedics on site, all Activity centre staff are first aid trained and informally we will have a number of doctors who are club members in attendance. In the case of emergency, then the ambulance service will be called via 999 emergency services.	
Spectators	Safeguarding issues concerning children and/or vulnerable adults.	Competitors, spectators	Low	This is a club event and limited to adults only. Therefore there will be no issues concerning the safeguarding of children or vulnerable adults. Club members bringing children will remain responsible for their safety and welfare throughout the event.	

Event site including temporary structures	Impact of wind on unsecured structures, falling from height, trips, collapse if not erected correctly.	Competitors, event team, spectators	Low	Event structures consist solely of a number of gazebos and an inflatable finish arch all of which will be securely fastened using guide ropes.	
Competitor access and egress	Slips, trips and falls, event site capacity, lighting if early start/late finish.	Competitors	Low	The event will be taking place during daylight hours only. The facility is sufficiently large to be able to cope with the low number of competitors. There is a grassy bank leading from the transition area to the swim entry. This can be uneven and competitors are briefed that this can be a trip hazard or otherwise cause athletes who are running to twist an ankle. Competitors are advised to take care.	
Car parking	Vehicle movement, collisions between vehicles and pedestrians, overcrowding.	Competitors, event team, spectators	Low	The facility is sufficiently large to be able to accommodate 80 competitors. The race is starting before other Activity Centre users will be arriving so there is no risk to competitors or pedestrians pre-start. The grassland upon which transition is based is a popular area for dog walkers and other members of the general public. It is sufficiently large so that there is no risk of conflict of interest between different centre users. The transition area is segregated from the nearby car-park by a low wooden fence so there is no risk to competitors and other centre users.	
Toilet/changing facilities	Insufficient provision, hygiene and waste management.	Competitors, event team, spectators	Low	Toilets, showers and changing facilities area available at the nearby Watersports Centre. This will be opened from 06;30 before the start of the middle distance race. The centre also has a café so food, drinks and other refreshments will be available.	
Crew welfare and catering	Long working hours, food preparation, PPE, adverse weather (suncream, ponchos).	Event team	Low	This is a low key club event with minimal marshalling requirements. Swim marshals will be released from their duties by 10:00, which is the cut off time by which all competitors will need to be out of the water. Timing/Transition/Finish marshals form a part of the same team and are all located within the transition area. They are provided with seats and also have shelter provided by the gazebos. Refreshments are available at the cafe. A post race BBQ is planned to which all marshals will be invited.	

OPEN WATER SWIM RISK ASSESSMENT



Water safety provider name	Matthew Critchley	Contact telephone	07887 800450
Number of powered craft	1	Number of non-powered craft/lifeguards	2
Wave size	0.1m	Wave frequency	1m
		Number of marshals required	5

Where the below hazards are identified and appropriate mitigation implemented, the risk assessment part of the SH₂OUT Event Self-Certification scheme is satisfied. For further information on the rest of the Self-Certification scheme, which includes information and guidance on creating normal operating procedures (NOP) and emergency action plans (EAP) please contact SH₂OUT - info@sh2out.org or review the SH₂OUT Guide to Organised Open Water Swimming: [SH₂OUT Guide to Organised Open Water Swimming](#)

Course Overview - please provide a summary of the open water swim course(s) and include a diagram if possible showing bouy and water safety cover placements

Water entry at the slipway. Competitors swim to the far side of the reservoir and congregate on the eastern corner of the reservoir pre start. From the start, proceed to the nearest buoy which should be passed on the left hand side before continuing with the course for the required number of laps, The course is a 450 meter circuit so competitors will complete: Sprint: 150 meters plus one lap of 450 meters (= 600 meters). Standard: 150 meters plus 3 laps of route (= 1550 meters). Middle distance: 150 meters plus 4 laps of route (= 1950 meters). Competitors are briefed about the water tower hazard and told to keep on the right hand side of the buoy before heading towards the turning buoy near the slipway.



Detail hazards that apply to the open water swim segment

HAZARD IDENTIFICATION		Who is affected?	Risk Level	RISK MITIGATION	
Description of hazard/risk	Competitors / Marshals / Spectators	High / Medium / Low	Description of controls to reduce the risk to as low as reasonably practicable	Who?	
Water safety team access to and egress from water; recovery of competitor in difficulty/drowning and transfer to emergency services	Competitors, water safety team, marshals	Low	Marshals to assist the recovery of swimmers from the slipway post swim. Powered boat and kayakers on water to assist. Competitors briefed to roll on back and raise hand in case of difficulty. People moving/removing/loading/preparing boats, canoes, windsurfing boards and sails and other equipment on access road and adjacent tarmac' areas - this risk is minimised by the early start time of the swim and a requirement that all swimmers be clear of the water by 10:00 when the rest of the activity centre opens. All participants at risk of: slipping, tripping and/or falling as well as cuts and abrasions to feet. Risk mitigated by pre race briefing and marshals to assist competitors as they enter/exit the water. All swimmers are at risk of physiological and/or medical symptoms however this risk has been mitigated by briefing about EAPs and the requirement for competitors to inform race staff of any predisposing medical conditions.	Race Director	

Competency of and communication between water safety team	Competitors, water safety team	Low	Activity centre staff are RYA and first aid trained. MSTC shore support and kayakers have all received training in accordance with the MSTC open water risk assessment. MSTC regularly carries out emergency action drills to assess competency of OW supervisors. Radio communications are in constant use between all on and off water safety staff for both Ardingly employees and MSTC club members.	Race Director
Competitor entry to the water	Competitors, water safety team, marshals	Low	Slipway is concrete with a good level of grip. The slipway is regularly scrubbed of weed to ensure that it is not slippery. There are marshals in place to assist the ingress and egress of competitors to/from the water	Race Director
Competitor exit from the water	Competitors, water safety team, marshals	Low	Slipway is concrete with a good level of grip. The slipway is regularly scrubbed of weed to ensure that it is not slippery.	Race Director
Swim exit to transition	Competitors	Low	Marshals to assist the recovery of swimmers from the .slipway post swim. The run to transition is on grass terrain and down an embankment. The ground conditions underfoot may be rutted and competitors are advise of this and to take care to avoid injury.	Race Director
Poor design of swim course, moving buoys resulting in swimming more than expected	Competitors	Low	The bouys were placed at the beginning of the club's open water swim season. There is no chance that their positions will change. Distances have been measured by GPS so accuracy of course length can be assured. The timing of events between the middle distance and sprint/standard distance is such that there is no possibility of any conflict at the turning buoy near the start of the course where starters leave the buoy to the left and competitors already on course left it to their right hand side.	Race Director
Poor water quality - detail what testing is in place, historic water quality data, communication with competitors	Competitors, water safety team, marshals	Low	Water quality testing is conducted in accordance with the guidance given by SH2OUT (Water Quality Guidance for Open Water Events and Training Sessions). Ardingly Reservoir is under the management of South East Water, who regularly undertake water quality testing on behalf of Ardingly Activity Centre. Ardingly Activity Centre is an RYA accredited training centre and also with British Rowing through Ardingly Rowing Club. Water quality testing takes place approximately fortnightly and reports are given to Mid Sussex Tri Club as part of the club's Standard Operating Procedures for open water swimming. In the event of an adverse report in the lead up to the event, the OW swim will be cancelled and the triathlon events will revert to a bike and run and the Aquathlon events will revert to a bike	Race Director
SH₂OUT Guide to Water Quality for Open Water Events				Race Director

Low/high water temperatures including wetsuit usage	Competitors	Low	South East Water policy requires that all open water swimming must be conducted having donned a wetsuit. In the event that the water temperature on the day exceeds 22 deg C, then the swim leg will be cancelled for the Sprint race. In the event that the water temperature exceeds 23 deg C, then the swim leg will be cancelled for both the Standard and Middle Distance races. In such instances, the races will commence from T1 with competitors held in the starting pen for relay competitors prior to start.	Race Director
Poor water conditions e.g. waves and currents	Competitors, water safety team	Low	Ardingly reservoir is non tidal and does not have a standing current. The prevailing wind can cause waves (no more than 20 centimeters in height) at the south eastern end of the course however this is rare. In the event of adverse weather, the swim leg will be cancelled for all competitors and the race will revert to a bike/run course.	Race Director
Obstructions and debris below, within and on top of water	Competitors, water safety team	Low	There are no obstructions below the water level. The main safety hazard is marked on the course map and is the water tower to the south of the swim route. Risk is mitigated by virtue of a turning buoy placed to keep swimmers well clear of the water inlets.	Race Director
Risk of missing swimmer	Competitors	Low	Swimmers are checked in and out by means of race numbers marked on their hands. Marshals check each competitor in	Race Director
Risk of swimmer overcrowding and conflict	Competitors	Low	The event is limited to 80 competitors and split over 3 disciplines. There is a 2 hour time window between the Middle distance race and the Standard/Sprint races. The start line is designed to allow competitors to self seed before the first turning buoy. The course length is such that all Middle Distance racers will be out of the water prior to the start of the Sprint/Standard distance races. The lap length is such that there is no chance that there will be any opportunity for competitors in the Sprint/Standard distance races overlapping. Even if that were the case, the competitor numbers are low enough for this not to be an issue	Race Director
Risk of novice/mixed ability swimmers and understanding of what to do in case of an incident	Competitors, water safety team, marshals	Medium	We only expect experienced club members to enter the middle distance race. We do not have novice open water swimmers within the club and those that are less confident will be briefed to start on the outside of the start line. Similarly, as this is a friendly club event, the more experienced competitors will be briefed to avoid swimming over (or otherwise causing panic to) less experienced athletes.	Race Director

Conflict with other venue users	Competitors, water safety team, marshals	Low	The only other on-water activity at this time of day will be Ardingly Rowing Club. The Activity Centre has well documented procedures to manage rowing and open water swimming. There is a 200 meter safety zone between the 2 activities. There are typically other water users (sailors, stand-up paddle boarders and the like) however they will not be active until the swim section is completed (no later than 10:00)	Activity Centre Manager
Poor weather conditions - sun and glare; electrical storms; wind, swell and waves; mist and fog	Competitors, water safety team, marshals	Low	Adverse weather conditions do not generally cause an issue at Ardingly. In the event of electrical storms however, then a decision will be made prior to race start as to whether to proceed with the swim. If for any reason that there is a catastrophic weather situation that builds whilst competitors are on the water, the Activity Centre has well documented plans for the recall of water users. In the case of open water swimmers, this includes the use of klaxons as well as kayakers shepherding swimmers to the nearest land. It should be noted that the swim course is never more than 100 meters from landfall.	Race Director/Activity Centre Manager

CYCLE RISK ASSESSMENT

Complete both Section 1 (general hazards that apply to the whole cycle course) and Section 2 (route-specific hazards found along the cycle course)

[British Triathlon Guide to Cycle Course Design for Events Taking Place on the Public Highway](#)

Course Overview: provide a brief description of the cycle route(s) and link to route maps if available

Section 1 - Detail general hazard that apply to the whole cycle course

HAZARD IDENTIFICATION	Who is affected?	Risk Level	RISK MITIGATION	
Description of hazard/risk	Competitors / Marshals / Spectators / Other Road Users	High / Medium / Low	Description of controls to reduce the risk to as low as reasonably practicable	Initials
Interaction with other users - vehicles, horse riders, pedestrians, non-event cyclists	Competitors, spectators, marshals, other road users	Low	All relevant agencies (South East Water, West Sussex Highways Agency and Sussex Police) been informed of the race. The swim takes place in Ardingly Reservoir and the club has a long-standing relationship with the Watersports and Activity Centre manager, who has been involved in the organisation of the event. The run takes place on public footpaths so there are no other landowners and stakeholders who need to be notified. Advance notification signage have not been requested by any agency. The cycle course will be clearly signed for competitors and the awareness of other road users. This will include the use of strategically placed "Caution Bike Race" and "Caution Runners in the Road" signs were necessary.	MC
Road defects e.g. potholes, poor surface	Competitors	Low	An initial assessment of the road conditions has already been carried out and there are a few minor potholes/surface defects but nothing that would otherwise require reporting to local highways for repair. A further assessment will be made on the day prior to the race and any surface defects will be highlighted with spray paint.	MC
Competitors unfamiliar with cycling regulations	Competitors, other road users	Low	Competitors will be briefed to adhere to Highway Code/relevant traffic laws and that the event is being run under British Triathlon Competition Rules. The club has a webpage that provides all competitor information for the tri festival. This includes links to all course routes for the bike and run legs. The swim leg is the standard club OW training circuit so no additional information is required other than that to be provided during the pre-race briefing.	MC

Competitors unfamiliar with route	Competitors	Low	<p>The club has a webpage that provides all competitor information for the tri festival. This includes links to all course routes for the bike and run legs. Competitors are club members who are familiar with, not only the local roads, but the standard courses used for this event. Nevertheless, course routes are available electronically to download to Garmin devices. The cycle course is clearly signed for competitors and key points identified in pre-race briefing. As this is a low key event, there are no marshals on the bike leg. Competitors are therefore advised to take a mobile phone with them in their saddle bag in case of emergency or gear failure to arrange collection/recovery. Competitors are also instructed that any communication devices may only be used in case of emergency and should not be used for any other purpose and certainly not whilst they are in motion or otherwise in control of their bike. No 'broom wagon' is available for this event however competitors are counted back into T2 and a vehicle will be sent out in the event that any competitor is unduly over a reasonable time for their respective race length.</p>	MC
Marshals on course	Competitors, marshals, other road users	Low	<p>There are no marshals on the bike/run legs other than one person whose sole responsibility is to ensure the safe egress of cyclists from the service road leading to the Activity Centre and the main road. Marshals are briefed before being stationed on course, being the swim entry/exit and transition area with the one exception noted above. Hi-viz clothing tabbards will be provided. Radio/phone contact with event HQ is not required given the compact nature of the swim/transition area and all marshals are within a couple of minutes walk of race HQ, which will be the transition area. Marshals to be provided with whistles and flags where required, which will be the swim leg only. There are no marshals on the bike/run legs so there is no requirement to brief them about the need to avoid stopping traffic.</p>	MC

Section 2 - Detail route specific hazards that are found along the cycle course (turn-by-turn risk assessment)

When risk assessing the cycle course the main hazards to consider include:

- Turns and junctions - right turns should be avoided as far as possible unless the road is closed to other traffic
- Blind bends, particularly on narrow roads where there is the potential for cyclists to stray onto the opposite carriageway should be avoided as far as possible
- All junctions, sharp bends, hill crests, bridges, traffic calming measures, roundabouts/mini-roundabouts, pedestrian crossings, traffic signals
- Hazards created by the position or movement of other road users (e.g. parked cars, the potential for a build up of traffic turning into a retail park or garden centre)
- Hazards caused by changes to the road surface or variations in the road surface e.g. raised manhole cover, potholes, gravel on corners
- Changes to road width
- Weather - either very cold (especially after pool swim) or very hot, leaf fall, soggy ground

Common safety measures to mitigate the risks posed by the above hazards are:

- Signage for both competitors and other road users, both on the day in advance of the event
- Marshals (possibly with whistle and/or red flag to highlight particular hazards) to interact with competitors only, unless holding the required qualifications to manage traffic
- Marking of potholes, sweep of gravel
- Foot-down point to bring competitors to a stop before proceeding
- Competitor pre-race information and briefing

HAZARD IDENTIFICATION				Who is affected?	Level	RISK MITIGATION				
ID#	Applies to which race?	mi/km from start	Symbol	Description of hazard detail junction/road name/number	Competitors / Spectators / Marshals / Other Road Users	High / Medium / Low	Description of controls to reduce the risk to as low as possible e.g. briefing, signage, foot down point	Marshals Number	Signs	
									Cycle Event	Direction Arrows
1	All Races	0.0km		ARDINGLY RESERVOIR car park access road to junction with COLLEGE ROAD: Uneven and poor road surface Multiple speed humps Short but steep hill Keep left	Competitors, Other Road Users	Low	Competitors advised of poor road surface and told to moderate speed until out on the public highway			
2	Standard and Middle Distance	1.1km		Right turn from reservoir access road into COLLEGE ROAD towards HAYWARDS HEATH MARSHAL HERE	Competitors, Other Road Users	Medium	DANGER - stop - foot down to ensure no oncoming traffic from both sides	1	Caution Cycle Event Signs	Standard and Middle Distance Turn Right
3	Sprint Distance	1.1km		Right turn from reservoir access road into COLLEGE ROAD towards HAYWARDS HEATH MARSHAL HERE	Competitors, Other Road Users	Medium	DANGER - stop - foot down to ensure no oncoming traffic from both sides	1	Caution Cycle Event Signs	Sprint Only Turn Left
4	Sprint Distance	1.5km		Slow uphill section Competitors to exercise caution when passing Ardingly College Entrance as there is a road crossing to sports grounds on far side of road	Competitors, Pedestrians, Other Road Users	Low	Competitors to adhere to Highway Code and stop if lights require it			

5	Standard and Middle Distance	2.2km		Initially down hill then s bend into short steep hill. 400 meters after COPYHOLD LANE sunken manhole cover Steep downhill slope adjacent to golf club. Visibility potentially affected by density of overhead trees. S bend at bottom of hill Right hand junctions from: golf course, Roundwood Lane and Brook Lane. BY SUNTE (opposite Brook Lane)	Competitors	Low	Vigilance required in case of turning traffic The sunken manhole cover will be marked with spray paint and a warning provided 10 meters prior		Orange Spray Paint on Road in advance of hazard	
6	Standard and Middle Distance	3.8km		Left turn at slip road just before roundabout from HIGH BEECH LANE into SUNTE AVENUE	Competitors	Low	Slip road has give way markings to traffic from right. Approach to roundabout has good line of sight ahead (PORTSMOUTH LANE) but limited line of sight from right (GANDER HILL)			Turn Left
7	Standard and Middle Distance	3.8km		Parked cars both side of road along both side of SUNTE AVENUE	Competitors, Other Road Users	Medium	Competitors briefed about this and to exercise caution in the event of vehicles moving out or car doors being opened			
8	Standard and Middle Distance	5.0km		Turn left from SUNTE AVENUE into HICKMANS LANE	Competitors, Other Road Users	Medium	T-junction. Poor visibility right. Be careful of cars from right coming from bend			
9	Standard and Middle Distance	5.0km		HICKMANS LANE	Competitors, Other Road Users	Medium	Numerous left hand junctions - BROOKWAY, FINCHES PARK ROAD, FINCHES LANE & THE WELKIN Hickman's Lane narrows as it nears T-junction with (Lindfield) High Street - slow down.			
10	Standard and Middle Distance	5.1km		Turn left from HICKMAN LANE into (Lindfield) HIGH STREET	Competitors, Other Road Users	Medium	Vehicles parked both sides of road Uphill to right hand bend.			Turn Left
11	Standard and Middle Distance	6.0 km		HIGH STREET leads into ARDINGLY ROAD and then (as it nears Ardingly) LINDFIELD ROAD	Competitors	Low	Left hand bend and short but steep downhill with sweeping right and then more gentle left hand bend. Road surface may be slippery because of washed debris Uphill incline begins just after right hand junction with PARK LANE and continues to ARDINGLY VILLAGE Long slow section leading to Ardingly village			
12	Standard and Middle Distance	9.7 km		LINDFIELD ROAD (Ardingly)	Competitors	Low	Junction left with COLLEGE ROAD			Straight On

13	Sprint Distance	2.7km		SPRINT COURSE REJOINS MAIN COURSE	Competitors	Low	Junction right with LINDFIELD ROAD			Turn Left
14	All Races	9.7km (2.7 km SPRINT)		Continue through Ardingly Village into SELSFIELD ROAD/ARDINGLY ROAD (B2028) towards TURNERS HILL	Competitors	Low	<p>Junction Left, very quickly, with STREET LANE</p> <p>Narrow road - Cars parked on both sides and particularly left, near side. Be careful of on-coming vehicles within village and cars from minor road junctions and drives within village.</p> <p>Road widens just outside of village as it approaches SOUTH OF ENGLAND SHOWGROUND. Good road surface. 4 left hand junctions from/to showground but all with good visibility.</p> <p>2 left hand junctions to/from WAKEHURST PLACE with good visibility.</p> <p>Pot-holed and uneven road surface just after WAKEHURST PLACE close to left hand edge of road. Visibility may be affected by overhanging trees on both sides of road.</p> <p>800 meters before the SELSFIELD ROAD junction, there is a small but deeply sunken drain-hole cover approximately 1 meter out from the kerb.</p> <p>Uphill incline. Note right hand junction with SELSFIELD ROAD at crest of incline and as road bends left.</p> <p>Downhill incline with left and then right hand bends towards mini-roundabout at WITHPITS and then short uphill incline towards crossroads at TURNERS HILL</p>			

HAZARD IDENTIFICATION					Who is affected?	Level	RISK MITIGATION				
ID#	Applies to which race?	mi/km from start	Symbol	Description of hazard/risk detail junction/road name/number	Competitors / Spectators / Marshals / Other Road Users	High / Medium / Low	Description of controls to reduce the risk to as low as possible e.g. briefing, signage, foot down point	Marshals		Signs	
								Number	Cycle Event	Direction	Arrows
15	All Races	16.3 km (SPRINT 9.3km)		TURNERS HILL - Crossroad at crest of hill	Competitors, Other Road Users	Low					
16	Standard and Middle Distance	16.3 km		TURNERS HILL CROSSROAD - carry on straight. Standard and Middle Distance carry on along B2028	Competitors, Other Road Users	Low	Be aware of traffic from left ((CHURCH ROAD), oncoming vehicles seeking to turn right and traffic from right (EAST STREET). Steep downhill incline. Left hand sweeping bend. At bottom of hill, road bends to right.				Middle and Standard Straight On
17	Sprint Distance	9.3km		TURNERS HILL CROSSROAD - Turn Left	Competitors, Other Road Users	Low	Only one junction on this road, a Right Turn at Turners Hill Road. The rest of the road to Cowdray Arms T-junction is smooth fast tarmac PADDOCKHURST ROAD has recently been resurfaced and is in excellent condition Caution queueing traffic possible at right turn Caution in case of Worth School Traffic				Sprint Only Turn Left
18	Standard and Middle Distance	16.5km		TURNERS HILL ROAD	Competitors, Other Road Users	Low	There is a new roundabout leading to CLOCKFIELD HOUSING ESTATE on the right hand side of the road approximately 200 meters after the TURNERS HILL junction with a set of pedestrian crossing lights just beyond that. (WALLAGE LANE) just after bottom of hill. A significant pothole approximately 30 cm off the kerb 50 meters prior to the turning into WYNLEA CLOSE on the right hand side. Vehicular and pedestrian traffic through CRAWLEY DOWN				Straight On
19	Standard and Middle Distance	20.4km		DUKES HEAD ROUNDABOUT - Turn first left onto COPTHORNE COMMON ROAD (A264) heading towards CRAWLEY	Competitors, Other Road Users	Medium	Be careful at this junction and on this section of road Fast travelling vehicular traffic. Mostly a good flat road surface however it is rutted in places. This is a potentially fast section. Wide road. Keep left and where possible, stay inside gutter lane. Be aware of traffic from left at Texaco garage and pedestrians seeking to cross road at COPTHORNE GOLF COURSE				Turn Left

20	Standard and Middle Distance	22.8k m		COPTHORNE HOTEL ROUNDABOUT (A264) take second left onto COPTHORNE ROAD (A2220) towards THREE BRIDGES/CRAWLEY	Competitors	Low	DO NOT turn into hotel &/or industrial estate (1st turning left) Poor and uneven road surface up to bridge over M23. (OLD HOLLOW) shortly after turning from roundabout and then a number of house/drive junctions after M23 bridge as approach the roundabout.			Turn Left
21	Standard and Middle Distance	24.7k m		COPTHORNE ROAD (A2220) junction with BALCOMBE ROAD (B2036) - turn left onto BALCOMBE ROAD (B2036) towards WORTH/MAIDENBOWER	Competitors	Low	Good visibility of traffic from left and ahead Multiple junctions left and right along BALCOMBE ROAD (B2036). Uphill incline towards mini-roundabout CRAWLEY LANE junction with TURNERS HILL ROAD. Straight ahead - BE AWARE of traffic coming from CRAWLEY LANE. This roundabout is quickly followed by another. WORTH ROAD. Straight ahead - downhill incline towards another roundabout MAIDENBOWER DRIVE. Straight ahead - vehicles from right have STOP requirement at roundabout but be careful. 100 meters prior to LUCERNE DRIVE ROUNDABOUT there is a pedestrian crossing with traffic lights. Exercise caution. LUCERN DRIVE/M23 slip road. Road divides into 2 lanes - take right hand lane into roundabout to go straight ahead over M23. Uphill incline towards another roundabout at M23 junction 10a.			Turn Left
22	Standard and Middle Distance	27.2k m		Stay on BALCOMBE ROAD (B2036) across M23 junction 10a roundabout towards WHITELEY HILL/COWDRAY ARMS PUBLIC HOUSE & BALCOMBE	Competitors	Low	Uphill section with traffic from left, coming from M23 slip road. BE CAREFUL. Uphill incline - this may well be a slow part of the course. Visibility may be affected by overhanging trees. Forest both sides of road PADDOCKHURST ROAD, B2110) at COWRAY ARMS			Straight On
23	Sprint Distance	13.6k m		SPRINT RACE REJOINS MAIN ROUTE with LEFT TURN AT COWDRAY ARMS T JUNCTION	Competitors, Other Road Users	Medium	Caution while rejoining as cars and bicycles may be approaching at speed			Sprint Only Turn Left

24	All Races	27.2k m (SPRINT 13.6k m)		Carry on straight	Competitors	Low	Minor potholes approximately 800 meters after the COWDRAY ARMS and again 400 meters after the junction with Stoney Lane (LHS) short uphill incline Note the junction right (HIGH STREET, B2110) The road then slopes downhill on a potentially fast section. (STONEY LANE) & (BOUNDARY ROAD) as road sweeps right and then left into BALCOMBE Horridly steep section leading up through bollards. Keep left.			Straight On
25	All Races	32.2 km (SPRINT 16.4 km)	 	Turn left opposite BOLNEY SCHOOL into HAYWARDS HEATH ROAD	Competitors	Low	Still slightly uphill and some speed bumps. Be careful cycling through the village. Cars parked on both sides and numerous driveways to and from houses.			Turn Left
26	All Races	32.4 km (SPRINT 16.7 km)	 	At T-junction with BRAMBLE HILL & STOCKCROFT ROAD carry straight on - HAYWARDS HEATH ROAD	Competitors	Low	Be aware of traffic from left at junction Downhill section to mini roundabout			
27	All Races	32.8k m (SPRINT 17.1 km)		Continue on HAYWARDS HEATH ROAD - straight across mini-roundabout at junction with Mill LANE (left)	Competitors	Low	Good visibility of traffic from ahead. Poor visibility of traffic from left (MILL LANE) but risk is mitigated by the fact that this is a very quiet country lane with minimal road users Uphill gradient leading out of village.			
28	All Races	36.3k m (SPRINT 20.2k m)		Railway bridge over HAYWARDS HEATH ROAD	Competitors, Other Road Users	High	Be careful of bend under bridge and particularly on coming traffic. Very poor visibility and possibility of high sided vehicles in the middle of the road. Competitors warned of this hazard			Caution Signs
29	All Races	36.9k m (SPRINT 20.8k m)		HAYWARDS HEATH ROAD	Competitors	Low	Left hand junctions (NALDRED FARM & COTTAGES and then COPYHOLD LANE)			

HAZARD IDENTIFICATION				Who is affected?	Level	RISK MITIGATION					
ID#	Applies to which race?	mi/km from start	Symbol	Description of hazard/risk detail junction/road name/number	Competitors / Spectators / Marshals / Other Road Users	High / Medium / Low	Description of controls to reduce the risk to as low as possible e.g. briefing, signage, foot down point	Marshals		Signs	
								Number	Cycle Event	Direction Arrows	
30	Sprint Distance	21.2 km		LEFT TURN INTO COPYHOLD LANE	Competitors	Low	Very low gear required for the left turn as very steep for 30m Copyhold Lane a reasonable surface and no junctions, but is quite windy until it reaches T junction at College Road to rejoin main route again			Sprint Only Turn Left	Standard and Middle Distance Straight On
31	Standard and Middle Distance	34.9 km		Carry on along HAYWARDS HEATH ROAD	Competitors	Low	STEEP uphill section over BORDEHILL, followed by downhill Junction right - (BORDEHILL GARDENS) Uphill gradient Junction right at top of hill Downhill gradient Be careful of junctions: Left (FAIRFIELD WAY, OAKHURST LANE, OLD WICKHAM LANE & HILL CLOSE) right (PENLAND ROAD, BARNMEAD & BRIDGERMILL) Sharp left hand bend at bottom of hill (opposite junction with BURRELL ROAD - Sainsbury's access road)				

32	Standard and Middle Distance	36.3 km		HAYWARDS HEATH ROAD leading to COLLEGE ROAD and then GANDER HILL	Competitors	Low	<p>Left hand bend from BALCOMBE ROAD under railway bridge, leading into COLLEGE ROAD/GANDER HILL</p> <p>Pothole 20 meters south of HANLYE ROAD junction</p> <p>Be aware of cars parked left and right. Be careful of oncoming traffic</p> <p>Uphill gradient at GANDER HILL before downhill gradient to mini-roundabout at junction with PORTSMOUTH LANE (left), SUMMER HILL LANE (right) and SUNTE AVENUE (ahead)</p>			
33	Standard and Middle Distance	39.8 km	 	GANDER HILL	Competitors	Medium	<p>Be careful of cars from right (SUMMERHILL LANE) because of poor visibility.</p> <p>Poor visibility too for traffic from right (SUMMERHILL LANE).</p>			Straight On
34	Middle Distance	39.8 km		A second lap is now identical to the first until the roundabout from GANDER HILL/SUNTE AVENUE/SUMMERHILL LANE/PORTSMOUTH LANE	Competitors	Low				<p>Middle Distance Only Straight On</p> <p>Middle Distance Only Lap 2 Turn Left</p>
35	Standard Distance	39.8 km		Turn left at the mini-roundabout into PORTSMOUTH LANE (junction with SUMMER HILL LANE (right) and SUNTE AVENUE (ahead) heading north back to the reservoir	Competitors	Low				Standard Distance Only Turn Left

36	Middle Distance	75.8km m		Turn left at the mini-roundabout into PORTSMOUTH LANE (junction with SUMMER HILL LANE (right) and SUNTE AVENUE (ahead) heading north back to the reservoir	Competitors	Low				Middle Distance Only Straight On Middle Distance Only Lap 2 Turn Left
37	Standard and Middle Distance	76.1 km (STANDARD 40.1 km)		Slight uphill section before gentle left hand sweeping bend on downhill gradient and then right hand turn as road changes to HIGH BEECH LANE	Competitors	Low				
38	Standard and Middle Distance	76.1 km (STANDARD 40.1 km)		Left hand junctions - BIRCHEN LANE, BROOK LANE, ROUNDWOOD LANE and entrance to golf course. Horridly steep uphill gradient alongside the golf course. Very slow section	Competitors	Low				
39	Standard and Middle Distance	76.8 km (STANDARD 40.8 km)		Left hand junction at top of hill - (SANDRIDGE LANE) leads to houses Downhill section alongside golf course. Be careful of the right hand bend at bottom of hill Junction left (COPYHOLD LANE)	Competitors	Low				
40	Sprint Distance	22.8km m		Sprint TURN LEFT at T-junction into College Road, caution for traffic and bikes from right, visibility is good	Competitors	Low				
41	All Races	77.4 km (STANDARD 41.4 km) (SPRINT 22.8 km)		Road continues downhill, first with right hand bend then, at bottom over LOWER RYELANDS BRIDGE, left hand bend. Uphill gradient towards HANSON AGGREGATES at the old RAILWAY STATION	Competitors	Low				

42	All Races	78.6 km (STANDARD 42.6 km) (SPRINT 24.0 km)		 <p>Left turn into RESERVOIR ACCESS ROAD Keep left. Speed bumps Uneven road surface Uphill gradient approaching transition</p>	Competitors	Low	Cyclists briefed to exercise caution in terms of uneven road surface and possibility of traffic entering/exiting car park			
43	All Races	79.6 km (STANDARD 43.6 km) (SPRINT 25.0 km)		Enter Transition	Competitors, Other Road Users	Low	Dismount line just before car park entrance to minimise risk of conflict with other road users			
44										

RUN RISK ASSESSMENT

Complete both Section 1 (general hazards that apply to the whole run course) and Section 2 (route-specific hazards found along the run course)

Course Overview: provide a brief description of the run route(s) and link to route maps if available

Section 1 - Detail general hazards that apply to the whole run course

HAZARD IDENTIFICATION	Who is affected?	Risk Level	RISK MITIGATION	
Description of hazard/risk	Competitors / Marshals / Spectators / Other Road Users	High / Medium / Low	Description of controls to reduce the risk to as low as reasonably practicable	Initials
Conflict with other users - vehicles, horse riders, pedestrians, non-event runners/cyclists	Competitors, spectators, marshals, other road users	Low	No landowners to be informed. The run takes places for the most part on public bridlepaths, which are used by walkers and horse riders. Competitors are briefed to be considerate to other users. Besides traffic density from runners is sufficiently low so as not to be an issue for other path users.	
Competitors unfamiliar with route	Competitors, other road users		Run route is available to competitors on the club website. Additionally this is an out and back course with no opportunity for competitors to get lost. Finally this is a club event and all competitors are familiar with the route and the various turn points for differing distances. The run course is clearly signed for competitors and where necessary there are caution "Runners in the Road" signs on the 100 meter segment where competitors on the middle distance race are required to use public roads. All key points will be identified in the pre-race briefing. This mostly consists of number of laps for each event distance and turn points.	
Marshals on course	Competitors, marshals, other road users		There are no marshals on the run route as this is a low key club event	

Section 2 - Detail route specific hazards that are found along the run course

When risk assessing the run course the main hazards to consider include:

- The running surface e.g. does it deteriorate if wet, will competitors be prepared if there are off-road sections, are there cattle grids to negotiate
- Road/path width - is it wide enough, particularly if it is an out and back course? Are there any blind bends that could cause collision?
- Street furniture e.g. benches, lampposts, waste bins
- Changes in surface
- Are there any road crossings that require marshals
- Whether the course is open to the general public e.g. in a park, along a promenade
- Access for emergency services - particularly for off-road run courses
- Weather - either very cold (especially after pool swim) or very hot, leaf fall, soggy ground

Common safety measures to mitigate the risks posed by the above hazards are:

- Signage for both competitors and other road users, both on the day in advance of the event
- Marshals (possibly with whistle and/or red flag to highlight particular hazards) to interact with competitors only, unless holding the required qualifications to manage traffic
- Competitor pre-race information and briefing

HAZARD IDENTIFICATION					Who is affected?	Level	RISK MITIGATION			
ID#	Applies to which race?	mi/km from start	Symbol	Description of hazard/risk detail junction/road name/number	Competitors / Spectators / Marshals / Other Road Users	High / Medium / Low	Description of controls to reduce the risk to as low as possible e.g. briefing, signage	Marshals Number	Signs	
									Running Event	Direction Arrows
1	All Distances	0.0km		From transition head north along path towards the gate at LITTLE SAUCELANDS	Competitors	Low	Water/feed station in transition Make sure you have sufficient hydration/gels/nutritional supplements with you. Slight uphill gradient			
2	All Distances	0.2km	 	LITTLE SAUCELANDS gate Go through the gate and follow the path northwards. Path meanders alongside the reservoir	Competitors, Other Road Users	Low	This is a swing gate. The path is gravel and mud. Uneven surface - tree roots and stones Short, slight incline just through gate Otherwise fairly flat until short, uphill gradient as the path approaches SANDHOLE WOOD gate		Warning Runners on Path	
3	Sprint and Standard Distance	1.15km		Turn ahead	Competitors	Low				Sprint and Standard Turn Ahead
4	Sprint and Standard Distance	1.25km		Turn here	Competitors	Low				Sprint and Standard Turn Here
5	Middle Distance	1.4km		Turn left onto BALCOME LANE	Competitors, Other Road Users	Medium	Competitors briefed to stay off the road and on the footpath		Warning Runners in Road	Turn Left

TRANSITION RISK ASSESSMENT

Transition Overview: provide a description of transition area or include a transition plan showing competitor flows, in/out gates and bike mount/dismount location

Detail general risks that apply to the transition area

HAZARD IDENTIFICATION	Who is affected?	Risk Level	RISK MITIGATION	
Description of hazard/risk	Competitors / Marshals / Spectators	High / Medium / Low	Description of controls to reduce the risk to as low as reasonably practicable	Marshals Number
Collision/congestion of competitors - flow of competitors through transition	Competitors, marshals	Low	Low number of competitors split across three race distances with the middle distance race starting 2 hours earlier than the standard/sprint races. Spacious grassy area for transition to ensure that there is no congestion/choke points. Additionally transition has been designed so that there is a one-way flow of competitors through transition.	3
Collision/congestion of competitors - entry and exit gates, mount and dismount lines	Competitors, marshals	Low	The Mount/Dismount line is on the exit of a car park. There is a left hand bend and competitors once they have reached the mount line have good visibility of any other road users. Risk is further mitigated by the fact that this is a quiet service road leading to the Watersports Centre. Competitors only have a 10 meter run from the exit of the grassy transition area to the mount line thereby further limiting the risk to competitors and other road users.	
Cuts to feet, slips and trips - suitability of transition area surface	Competitors	Medium	The swim exit is onto a concrete slipway, which is generally kept clear of weed however the surface is rough and can lead to abrasion. From there, competitors run down a grassy slope that has concealed ruts. This is a trip hazard for competitors as well as the potential cause of twisted ankles. These risks are covered in the competitors briefing. Once out of T1 there is a short gravel section before the mount/dismount line. Again, competitors are briefed about the hazards that this poses.	
Collapse of transition racking damaging people/equipment	Competitors, marshals	Low	The club owns brand new bespoke aluminium racking that is secure and poses no risk to competitors	
Theft of competitor possessions - security of transition area	Competitors	Low	Whilst the transition area is not enclosed, it is adjacent to the finish line and where the timing marshals will be situated throughout the race. The area is under constant observation. Risk is further mitigated by the fact that this is an area with a generally low level of passers-by.	

Unsuitable/illegal helmets/equipment being used by competitors	Competitors, marshals, spectators, other road users	Low	This is a low key club event and all competitors are aware of the rules relating to illegal equipment. This is further covered within the race briefing. Marshals will further conduct equipment checks at registration time.	
Competitors not adhering to mount/dismount lines (where applicable)	Competitors, marshals, spectators, other road users	Low	The mount/dismount line is 20 meters from the timing/finish area. Timing marshals will be observing and recording race numbers and times on exit from T1 and entry to T2. It will be their responsibility to further ensure that competitors observe the mount/dismount line.	

DECLARATION

I confirm that all required stakeholders and agencies have been notified, and received relevant permissions for the staging of this event.
 I confirm the event will be run in accordance with British Triathlon Competition Rules and any exceptions to these have been granted a rule exemption.
 I confirm that public liability insurance (minimum £5million indemnity) has been arranged and is in place for the event.
 I confirm that the British Triathlon Medical Guidance has been consulted and that the level of medical cover present at the event meets the recommended levels as a minimum.
 I confirm that all marshals will receive appropriate training and be fully briefed about their specific role before undertaking their duties.
 I confirm that the information provided in this risk assessment is correct and submitted in good faith, and will be implemented on the day accordingly.

Signed 

Signed

Name Matthew Critchley Event Organiser/Race Director

Date 17-Jul-19

Name Paul Richardson Safety Officer/Secondary RA Check

Date 17-Jul-19

Marshals Required	Adult	Kids
Swim Marshals	5	
Cycle Marshals	2	0
Run Marshals	0	0
Transition	3	
TOTAL MARSHALS	10	

Route Signage Required	Adult	Kids
Cycle Event	0	0
Running Event	0	0
Direction Arrows	0	0
TOTAL ROUTE SIGNAGE	0	0

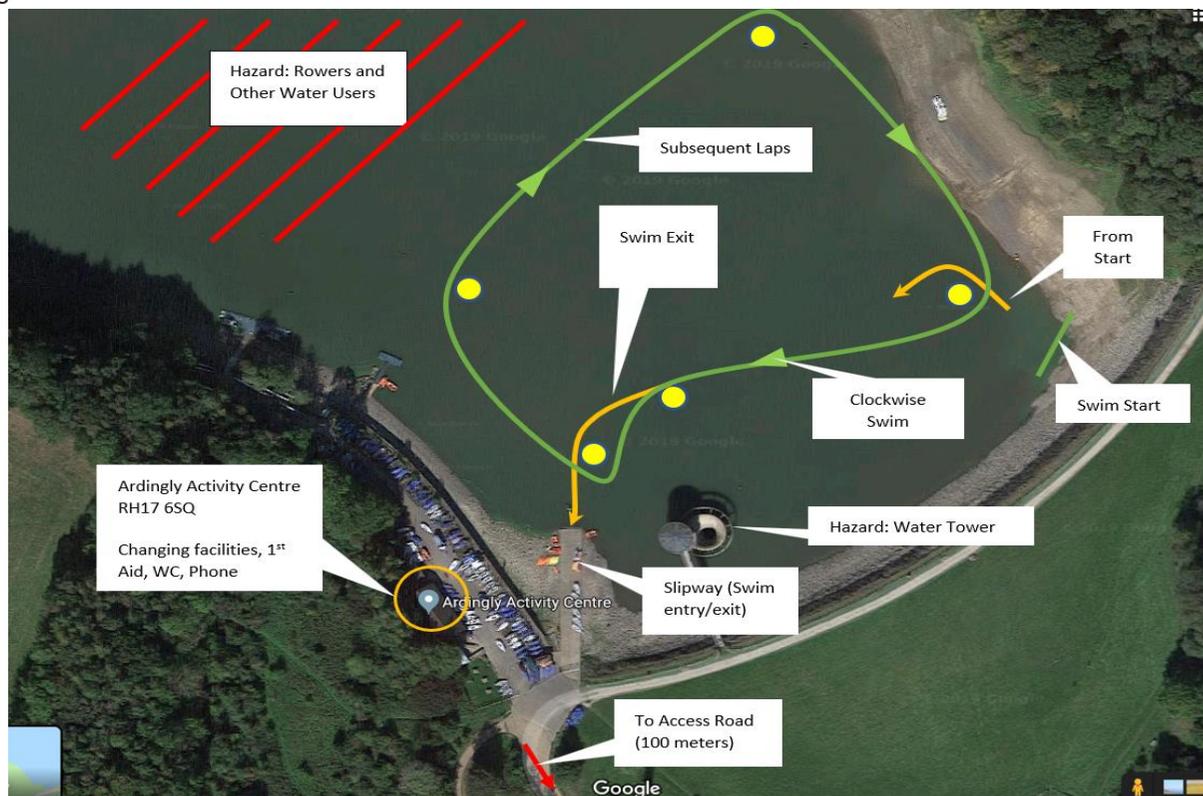
MAPS, PLANS AND PHOTOS

Please use the below space to insert swim/bike/run course maps, transition plans, and photographs which may assist with understanding of specific ID points.

Club website page can be found here for competitor briefing information prior to race day:

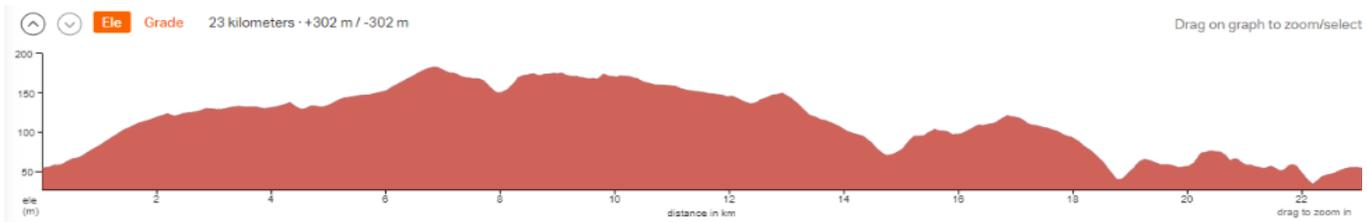
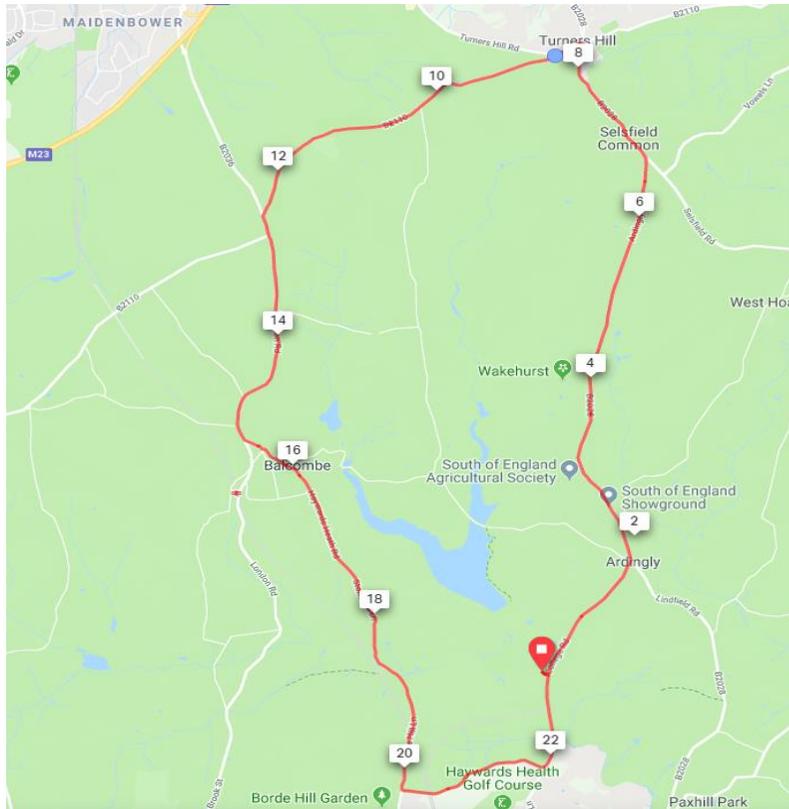
<https://midsussextriclub.com/club-events/seasons-events/mstc-triathlon-festival.aspx>

Swim Leg:



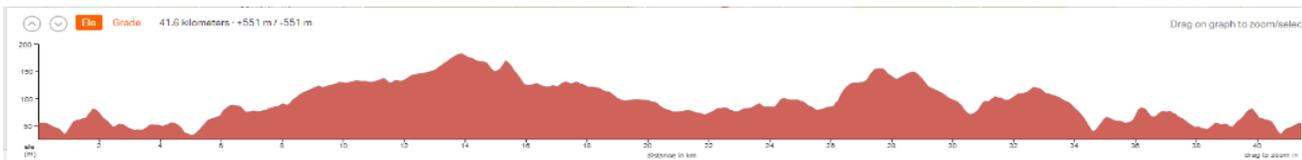
Bike Leg courses are shown below:
Sprint

<https://ridewithgps.com/routes/30503549>



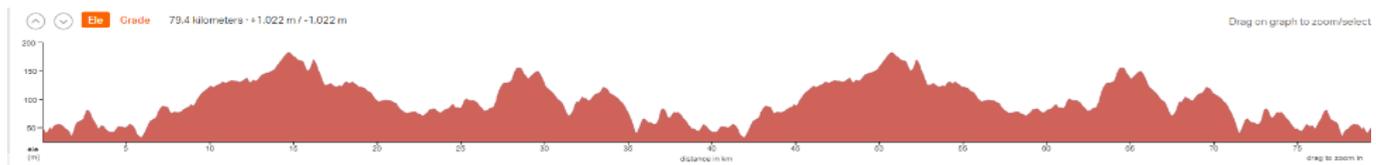
Standard

<https://ridewithgps.com/routes/5484476>



Middle Distance

<https://ridewithgps.com/routes/5864795>



Run leg courses are shown below:

