

## **General Activities Risk Assessment**

Location:	The Bear Grylls Adventure - Birmingham	Date of Issue:	05.04.2023
Department: Operation – All activities and Common areas		Date of	04.04.2024
		Review:	

Hazard	Persons at Risk	Existing Control	Risk Rating
Covid - 19	All	Sanitizer stations available across the site	Low
		2. Hand washing signs in all bathrooms	
		3. Contactless payments only at all till points	
		4. Building ventilation AHU set to maximum fresh air capacity	
		5. Cleaning once a day in all areas	
		6. Positive cases – Staff - Isolate for 5 days if unwell	
		7. Positive cases – Guests - Rebook their adventure	
		8. Covid First Aid grab bags available with extra PPE available	
Fire	All	Daily checks in place by the Duty Manager	Low
1		<ol><li>The site is fitted with an externally monitored automatic fire detection system</li></ol>	2011
		3. The site is fitted with a sprinkler system	
		4. Annual electrical inspection of all wiring on site	
		5. Emergency lighting in place – Tested monthly and annually	
		6. Fire alarms tested weekly and serviced annually	
		7. Evacuation procedure in place and trained annually	
		8. All evacuation routes are sign posted	
		9. Fire extinguishers inspected weekly and serviced annually	
		10. Sufficient number of staff are trained to use Fire extinguishers	
Security Threat	All	Incident Management Plan in place	Low
Security Timeat		2. Staff trained in de-escalation techniques	LOW
		3. NEC security and NEC police presence across the campus	
		4. CCTV and vehicle mitigation provision in place	
		5. Staff trained in Run, Hide, Tell procedures	
Physical Injury – Slips, Trips or Falls	All	1. All participants must complete a health disclosure form prior to starting the activity	Low
		2. All participants are given a safety briefing prior to an activity	LOW
All areas		3. All participants receive appropriate training prior to an activity	
		4. All activities are supervised, and assistance available at all times	
		5. Instructors and Hosts are fully trained and assessed to lead activities	
		6. All instructor training and assessments are logged, tracked and reassessed as required	
		7. All activity specific equipment is provided:	

	All	i. All equipment meets required standards and inspected internally and by external 3 <sup>rd</sup> party inspectors to regulation guidelines  8. Participants required to wear comfortable, appropriate clothing for activities  9. Participants to wear comfortable, flat soled, lace up shoes on activities  10. Participants are to remove jewellery as required for each activity  11. All activities have a by-pass option if a participant feels an element is beyond their capability  12. Appropriate flooring surfaces used throughout the attraction  13. All structures, environments and equipment are inspected periodically (daily, weekly, monthly & annually) to ensure compliance with relevant standards and legislation  14. First Aid trained staff on site	
Loss or Damage of Participants Belongings	All	<ol> <li>Secure lockers are provided free of charge to all participants</li> <li>Participants must leave all loose belongings, clothing &amp; jewellery in the lockers when they are on activities</li> </ol>	Low
Emotional Distress – Panic & Stress	All	<ol> <li>All challenges are disclosed prior to activity commencing</li> <li>All activities are supervised, and assistance is available at all times</li> <li>All activities are 'challenge by choice'</li> <li>By-pass options are available if a participant feels uncomfortable with an assault course element</li> <li>Instructors are trained to adjust the tone of the activity to suit the group and any competitive elements managed to be inclusive for all participants</li> <li>Consumption of alcohol is prohibited before all activities – participants will be precluded from the activity and not offered an alternative should this be the case</li> <li>Participants demonstrating verbal or emotional abuse towards others may be precluded from the activity and removed from site</li> </ol>	Low

Activity - Climbing			
Hazard	Persons at risk	Existing Control	Risk Rating
Physical Injury – Slips, Trips or Falls	Participants	<ol> <li>Bouldering and climbing walls built to meet BS EN 12572</li> <li>Routes set by experienced climbers in the team or an external company</li> <li>Holds inspected daily by instructors</li> <li>Any holds found to be unsafe will be marked/removed</li> <li>If loose holds prevent safe use of the wall the activity must be stopped</li> <li>Bouldering and climbing walls must be closed if any safety concerns are detected. Wall must not be reopened until a full structural inspection has been completed</li> <li>No spectators are permitted into the bouldering and climbing areas</li> <li>All participants are to be observed at all times</li> <li>Bouldering areas to be closely managed to ensure participant safety</li> <li>All participants must remove all loose-fitting items and tie up long hair prior to activity commencing</li> <li>All participants must remove all large hooped earrings and rings prior to briefing</li> <li>Instructors must assess suitability of participants clothing prior to starting activity</li> <li>Participant footwear will be closed toe footwear, trainer style shoes</li> <li>Any jewellery items that can't be removed need to be addressed with tape.</li> <li>If a participant can't or won't remove loose fitting clothing, they must be precluded from the activity</li> <li>Group to understand the 'STOP AND DESCEND' command</li> <li>300mm safety surface flooring fitted below the bouldering wall</li> <li>Participants should be spotted where appropriate while bouldering</li> <li>Bouldering - Participants advised to climb down the wall but not to hold on if they feel themselves falling and to bend knees on landing</li> <li>Participants demonstrating deliberate unsafe behaviour will be precluded from the activity</li> <li>Bouldering wall limited to 3.6m high</li> <li>Participants instructed not to climb above or below another climber on the wall</li> <li>Participants told not to walk on the floor near the wall where the</li></ol>	Low
Equipment Failure	Participants	<ol> <li>Bouldering and climbing walls built to meet BS EN 12572</li> <li>Holds inspected daily by instructors</li> <li>Any holds found to be unsafe will be marked/removed</li> <li>If loose holds prevent safe use of the wall the activity must be stopped</li> <li>Bouldering and climbing walls must be closed if any safety concerns are detected. Wall must not be reopened until a full structural inspection has been completed</li> <li>Bouldering and climbing areas inspected daily by instructors</li> <li>Auto belay devices are inspected daily, weekly and 6-monthly by instructors</li> <li>Auto belay devices are inspected annually by 3<sup>rd</sup> party manufacturer approved inspectors</li> <li>Bouldering and climbing walls inspected annually by manufacturer</li> <li>Climbing harnesses are inspected daily and bi-monthly by instructors</li> <li>Climbing harnesses are inspected 6-monthly by 3<sup>rd</sup> party insurer approved inspector</li> </ol>	Low

Hazard	Persons at Risk	Existing Control	Risk Rating
Physical Injury – Slips, Trips or Falls	Participants	<ol> <li>Height Restriction for high ropes course is between 1.3m (4ft2in) and 2.03m (6ft7in) – Height markers available in the entrance and on the activity</li> <li>Maximum weight restriction is 130.5kg (20.5st) – No minimum restriction</li> <li>Daily inspections carried out on open and close</li> <li>Instructors are responsible for attaching and detaching participants from the belay system</li> <li>Instructors are always present on the course when in operation, observing participants</li> <li>All staff are assessed to the Sky Trail Instructor standard following the RCI syllabus</li> <li>Sky Trail is a continuous belay system – participants attached at all times once off the ground, lanyard connected with a tamper proof pin-lock karabiner</li> <li>Harnesses meet EN 12277 type C safety standards</li> <li>Course and equipment inspected by in-house PPE trained staff periodically (daily &amp; bi-monthly)</li> <li>Course and equipment inspected annually by a 3<sup>rd</sup> party inspector under the ADIPs scheme</li> <li>Instructors to ensure all participants have removed all loose items, hair tied back and are suitably dressed prior to briefing</li> <li>Public access is prohibited under the high ropes structure</li> </ol>	Low
Equipment Failure	Participants	1. Only manufacturer approved equipment used 2. Course and equipment inspected by in-house PPE trained staff periodically (daily & bi-monthly) 3. Course and equipment inspected annually by a 3 <sup>rd</sup> party inspector under the ADIPs scheme 4. Any PPE found to have a fault is quarantined and reported to High ropes management immediately 5. Maximum weight (130kg/20.5st) set in accordance with manufacturers guidelines 6. Group sizes set to ensure the max capacity of the course is never exceeded 7. Maximum participants per element and platform are briefed out prior to the activity starting	Low
Unauthorised Access	Public	1. High ropes structure is fenced to a minimum of 1.8m on all sides 2. Access stairway is caged in up to 2m 3. Entry gate never left unattended when in operation and padlocked when not in use 4. Staff to manage the area when in operation to ensure no unauthorised access 5. NEC have 24hr security patrols and CCTV that cover area outside of the attraction	Low
Adverse Weather – High Winds or Lightning	Participants	1. High Winds  I. Maximum operational wind speed is 30mph  II. If instructors measure the wind speed above 30mph on a level of the course continuously within a 15min period, they are to close each level accordingly – re-open when conditions improve  III. Wind speeds are measured with an anemometer  IV. High ropes course to be fully inspected after any significant wind event  2. Lightning  I. Instructors to monitor weather daily  II. Activity halted immediately when thunder is heard and/or lightning is witnessed in the vicinity of the NEC – Full course evacuation  III. Activity is only to resume after 30mins of no thunder or lightning – If thunder or lightning observed in the 30mins the countdown of 30mins is reset  IV. Structure fitted with lightning conductors to ensure safe earthing in a lightning strike event  V. High ropes course to be fully inspected following a confirmed direct strike	Low

Activity – Zip Line	Damana at Diala	Fairting Control	Diele Detiese
Hazard	Persons at Risk	Existing Control	Risk Rating
Physical Injury – Slips, Trips or Falls	Participants	<ol> <li>Height Restriction for the zip line is between 1.3m (4ft2in) and 2.03m (6ft7in) – Height markers available in the entrance and start of the high ropes briefing</li> <li>Daily inspections in place for open and close of activity</li> <li>Maximum weight restriction is 130.5kg (20.5st) – Minimum restriction is 15kg (2.3st)</li> <li>Harness' and lines are fitted by a trained instructor and receive a second check by another instructor</li> <li>The zip line is directly supervised by an instructor at all times</li> <li>Participants are attached by an instructor to the continuous belay system at the chinook door in a safe zone by a koala trolley attachment (tamper proof)</li> <li>Instructor attached to a separate system to allow movement in chinook to dispatch participants safely</li> <li>Instructors to ensure all participants have removed all loose items, hair tied up and are suitably dressed prior to briefing</li> <li>A gate and a zip restraint is used to prevent premature access to the exit ledge of the chinook</li> <li>Participants are invited to the dispatch zone by an instructor</li> <li>A 2-way radio communication is established between dispatch and receiver with a 'landing clear' message delivered</li> <li>Guests are instructed to walk off the platform</li> <li>A back up buffer in place in the event of a zip stop failure</li> </ol>	Low
Equipment Failure	Participants	Only manufacturer approved equipment used  Zip line structure and equipment inspected by in-house PPE trained staff periodically (daily & monthly)  Zip line structure and equipment inspected annually by a 3 <sup>rd</sup> party inspector under the ADIPs scheme  Any PPE found to have a fault is quarantined and reported to High ropes management immediately  Maximum weight (130kg/20.5st) set in accordance with manufacturers guidelines  One person allowed on a zip line at any one time  Zip line external fencing set to a minimum of 1.8m	Low
Unauthorised Access	Public	<ol> <li>Entry gate to landing area padlocked when not in use</li> <li>Staff to manage the area when in operation to ensure no unauthorised access</li> <li>Chinook door is key locked overnight and key code entry when in operation</li> <li>NEC have 24hr security patrols and CCTV that cover area outside of the attraction</li> </ol>	Low
Adverse Weather – High Winds or Lightning	Participants	<ol> <li>High Winds         <ol> <li>Maximum operational wind speed is 30mph</li> <li>If instructors measure the wind speed above 30mph on the chinook platform continuously within a 15min period, they are to close the zip line – re-open when conditions improve</li> <li>Wind speeds are measured with an anemometer</li> <li>Zip line to be fully inspected after any significant wind event</li> </ol> </li> <li>Lightning         <ol> <li>Instructors to monitor weather daily</li> <li>Activity halted immediately when thunder is heard and/or lightning is witnessed in the vicinity of the NEC</li> </ol> </li> <li>Activity is only to resume after 30mins of no thunder or lightning – If thunder or lightning observed in the 30mins the countdown of 30mins is reset</li> <li>Zip line to be fully inspected following a confirmed direct strike</li> </ol>	Low

Hazard	Persons at Risk	Existing Control	Risk Rating
Physical Injury – Slips, Trips or Falls	Participants	<ol> <li>iFly area monitored by staff during operational hours</li> <li>Daily checks carried out to ensure it is safe to open</li> <li>Instructors are trained and regularly assessed by a 3<sup>rd</sup> party through IBA training syllabus to fly and instruct in the tunnel</li> <li>Instructors are trained and assessed by a 3<sup>rd</sup> party to safely drive the tunnel and adjust wind speed as necessary</li> <li>Wind tunnel is fitted with an e-stop on the driver panel for emergencies</li> <li>Hearing protection provided and enforced for both staff and guests in the tunnel and staging areas</li> <li>Instructors to ensure all participants have removed all loose items and are suitably dressed prior to briefing</li> <li>Participants are required to wear a flying suit, helmet, goggles and ear protection supplied by iFly</li> <li>Participants are required to fill an additional waiver to ensure they are fit to fly</li> <li>High flies only to be carried out by trained and assessed instructors holding a 'Flying with flyers' IBA qualification</li> </ol>	Low
Equipment Failure	Participants	<ol> <li>Wind tunnel and all equipment is inspected daily by trained instructors</li> <li>Wind tunnel has a thorough monthly inspection carried out by trained instructors</li> <li>Wind tunnel and all equipment is inspected annually by a 3<sup>rd</sup> party under the ADIPs scheme</li> <li>VFDs and motors inspected annually by a 3<sup>rd</sup> party inspector</li> </ol>	Low
Unauthorised Access	Public	<ol> <li>Tunnel manned by instructor and driver at all times when in operation</li> <li>Wind tunnel doors fitted with magnetic locks to prevent unauthorised access</li> <li>Driver panel fitted with thumb print access for trained staff only</li> <li>Fortress lock system in place where all keys are needed for VFD to power up</li> <li>iFly areas covered by CCTV</li> </ol>	Low

Hazard	Persons at Risk	Existing Control	Risk Rating
Physical Injury – Slips, Trips or Falls	Participants	<ol> <li>Daily inspections carried out by trained staff before opening</li> <li>Instructors are directly outside the top and bottom escape room doors to escort guests to and from the activity</li> <li>Rooms are monitored by instructors using CCTV when in use</li> <li>Equipment inspected for sharp edges and finger traps</li> <li>Slide exits fitted with a padded mat to reduce impact</li> <li>Participants briefed on how to safely descend the slide</li> <li>Participants given option to use a hessian sack to descend the slide</li> <li>Slides set to a 30-degree gradient to prevent descending to quickly</li> <li>Magnetic locks on the doors will automatically open in the event of a fire alarm</li> <li>Battery back up lights fitted in all rooms and corridors</li> </ol>	Low
Equipment Failure	Participants	<ol> <li>Slide built to manufacturers specifications</li> <li>Daily open and close checks carried out by a trained instructor</li> <li>Annual inspection carried out by a 3<sup>rd</sup> party inspector under the ADIPs scheme</li> </ol>	Low

Hazard	Persons at Risk	Existing Control	Risk Rating
Physical Injury – Slips, Trips or Falls	Participants	<ol> <li>Daily open and closing checks carried out by a trained instructor to ensure each obstacle and flooring is fit for use</li> <li>Soft impact style flooring used to reduce the risk of injury</li> <li>More difficult obstacles manned by an instructor to assist participants if needed</li> <li>Thick padding used on beams across the assault course to prevent contact with the wood by a participant</li> <li>Groups staggered at the start to avoid overcrowding on obstacles</li> <li>Long hair to be tied up</li> </ol>	Low
Equipment Failure	Participants	<ol> <li>Assault course is inspected daily by a trained member of staff</li> <li>Any obstacles found faulty are closed off and reported to the manager</li> <li>Assault course is annually inspected by a 3<sup>rd</sup> party company to meet the current regulations</li> </ol>	Low
Unauthorised Access	Public	<ol> <li>Assault course is staffed during operational hours</li> <li>Attraction doors secured during non-operational days</li> <li>Assault course is covered by CCTV</li> </ol>	Low

Activity – Archery				
Hazard	Persons at Risk	Existing Control	Risk Rating	
Physical Injury – Slips, Trips or Falls	Participants	<ol> <li>Daily open and closing checks carried out by a trained instructor to ensure equipment is fit for use</li> <li>All participants are directly supervised throughout the activity</li> <li>All participants receive a safety brief to include:         <ol> <li>Bows must point down range</li> <li>STOP command – cease firing</li> <li>Not proceed to targets until instructed to do so</li> <li>Only pick up equipment when instructed to do so</li> <li>How to remove arrows safely from the target</li> </ol> </li> <li>Range designed with a 10m lane length to account for arrow bounce back</li> <li>Participants provided with an arm guard to prevent injury</li> <li>Instructors to ensure all participants have removed all loose items and are suitably dressed prior to briefing</li> <li>Long hair is to be tied back</li> <li>Equipment continuously monitored throughout the day to ensure it stays in a good condition</li> </ol>	Low	
Equipment Failure	Participants	<ol> <li>Archery range and equipment is inspected daily by a trained member of staff</li> <li>Any equipment found faulty is quarantined and reported to the manager</li> <li>Only approved equipment is to be used on the range</li> <li>Maintenance carried out by trained staff only, following manufacturers guidelines</li> <li>Archery range and equipment inspected annually by a 3<sup>rd</sup> party under the ADIPs scheme</li> </ol>	Low	
Unauthorised Access	Public	<ol> <li>Archery ranges are staffed during operational hours</li> <li>Gates to range are kept closed at all times</li> <li>Bows and arrows never left unattended and locked away when not in operation</li> <li>Archery range is covered by CCTV</li> </ol>	Low	

Activity – Shooting	Persons at Risk	Existing Control	Rick Rating
Hazard Physical Injury – Slips, Trips or Falls	Persons at Risk  Participants	Existing Control  1. Daily open and closing checks carried out by a trained instructor to ensure equipment is fit for use 2. All participants are directly supervised throughout the activity 3. Lead Instructors must be over 21 years of age and be trained and assessed by an in house trainer 4. All participants receive a safety brief to include:  I. Weapons must point down range II. STOP command – cease firing III. Only pick up weapons when instructed to do so IV. Weapons left in a 'safe' mode when not in use 5. Range designed to minimise ricochet and allow adequate deflection/overshoot space 6. Range lanes have a physical divider between them 7. Participants provided with ear and eye protection	Risk Rating Low
		<ol> <li>Instructors to ensure all participants have removed all loose items and are suitably dressed prior to briefing</li> <li>Long hair is to be tied back</li> <li>Weapons continuously monitored throughout the day to ensure it stays in a good condition</li> <li>Instructor ratios always adhered to – 1:2 2:3+</li> <li>Activity stopped if any participants is not following the rules</li> <li>Ammunition is always locked away when range is unattended</li> </ol>	
Equipment Failure	Participants	1. Shooting range and equipment is inspected daily by a trained member of staff 2. Full safety brief and training given to all participants 3. Any equipment found faulty is quarantined and reported to the manager 4. Only approved equipment is to be used on the range 5. Maintenance carried out by trained staff only, following manufacturers guidelines 6. Shooting range and equipment inspected monthly by a technician and annually by a 3 <sup>rd</sup> party under the ADIPs scheme	Low
Unauthorised Access	Public	<ol> <li>Only shooting trained staff have access to the ranges</li> <li>Doors have magnetic and pin code locks to restrict access</li> <li>Weapons are never left unattended and locked away when not in operation</li> <li>Shooting range is covered by CCTV</li> </ol>	Low

Activity - Dive and Snork	el		
Hazard	Persons at Risk	Existing Control	Risk Rating
Physical Injury – Slips, Trips or Falls	Participants	<ol> <li>Daily open and closing checks carried out by a trained instructor to ensure equipment and area is fit for use</li> <li>All participants are directly supervised throughout the activity</li> <li>Dive Instructor trained to a minimum of PADI qualified assistant instructor</li> <li>Snorkel Guide trained in-house by a qualified trainer</li> <li>Designated Person in Charge must be on duty when dive tank in use – assessed by the Dive safety officer</li> <li>Surface tender present during all dive sessions</li> <li>Animals are on a regular feeding schedule and any unusual behaviour reported to the aquarist team</li> <li>Full body neoprene wetsuits and boots required for the diving activity</li> <li>Short neoprene wetsuits and boots required for the snorkelling activity</li> <li>All instructors trained in emergency first response first aid</li> <li>A medical waiver must be completed prior to activity commencing for all participants</li> </ol>	Low
Equipment Failure	Participants	Dive equipment is visually inspected daily by a trained member of staff before each dive All equipment is serviced periodically according to the manufacturer's guidelines All instructors trained in rescue techniques	Low
Drowning	Participants	<ol> <li>All participants are directly supervised throughout the activity in a controlled environment</li> <li>All instructors trained in rescue techniques</li> <li>All instructors trained in emergency first response first aid and Oxygen provision trained staff available</li> <li>Surface tender present during all dive sessions</li> <li>Full safety brief and training given to all participants</li> </ol>	Low
Decompression Sickness (DIVE)	Participants	1. Staff are trained in decompression theory 2. Aquarium has a constant depth of 4 metres 3. Time in water is monitored and kept to reasonable length to reduce the risk 4. Instructors trained on how to ascend/descend correctly and assist panicked divers	
Animals – Bites, Stings & Zoonosis	Participants	<ol> <li>A strict no touching the animals policy in place</li> <li>Animals are on a regular feeding schedule and any unusual behaviour reported to the aquarist team</li> <li>Animals are monitored regularly by the aquarist team</li> <li>Emergency evacuation procedure in place</li> <li>Wetsuits and boots to be worn at all times during the activities</li> <li>All cuts and grazes to be cleaned and covered before entering the water</li> <li>Participants to shower before and after both activities</li> <li>Immune-compromised persons are potentially at more risk – A medical waiver must be completed prior to activity commencing for all participants</li> <li>Instructors are trained on Merlin's Venomous and Dangerous Animal protocols</li> </ol>	Low

Activity – Axe Throwing				
Hazard	Persons at Risk	Existing Control	Risk Rating	
Physical Injury – Slips, Trips or Falls	Participants	<ol> <li>Daily open and closing checks carried out by a trained instructor to ensure equipment is fit for use</li> <li>All participants are directly supervised throughout the activity</li> <li>Instructors must be over 18 years of age and be trained and assessed by an in-house trainer</li> <li>All participants receive a safety brief to include:         <ol> <li>Axes to be thrown only from within the caged area towards the target</li> <li>How to safely throw and handle an axe</li> <li>STOP command – cease throwing</li> <li>Only pick up axes when instructed to do so</li> <li>Axes to be kept in locked cupboard when not been thrown</li> </ol> </li> <li>Range flooring and lane length designed to minimise bounce back</li> <li>Range lanes have a physical divider between them</li> <li>Instructors to ensure all participants have removed all loose items and are suitably dressed prior to briefing</li> <li>Long hair is to be tied back</li> <li>Axes continuously monitored throughout the day to ensure it stays in a good condition</li> <li>Instructor ratios always adhered to – 1:4</li> <li>Activity stopped if any participants is not following the rules</li> <li>Axes are always locked away when range is unattended</li> </ol>	Low	
Equipment Failure	Participants	<ol> <li>Axe range and equipment is inspected daily by a trained member of staff</li> <li>Full safety brief and training given to all participants</li> <li>Any equipment found faulty is quarantined and reported to the manager</li> <li>Only approved equipment is to be used on the range</li> <li>Maintenance carried out by trained staff only, following manufacturers guidelines</li> <li>Axe range and equipment inspected annually by a 3<sup>rd</sup> party under the ADIPs scheme</li> </ol>	Low	
Unauthorised Access	Public	<ol> <li>Only axe trained staff have access to the ranges</li> <li>Doors have magnetic pin code locks to restrict access</li> <li>Axes are never left unattended and locked away when not in operation</li> <li>Axe range is covered by CCTV</li> </ol>	Low	

Name	Signature
Stacey Palmer – Health and Safety Advisor	S. Palmer