2021

Via Ferrata Cornwall CIC Normal Operating Procedure 2021.1

THIS INCLUDES RISK ASSESSMENTS, LESSON PLANS AND GENERAL PROCEDURES

TONY BAKER

VIA FERRATA CORNWALL CIC | Goodygrane Activity Centre, Halvasso, Longdowns, Penryn, Cornwall, TR10 9BX

Via Ferrata Cornwall CIC
Normal Operating Procedures

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Policy statement

Via Ferrata Cornwall CIC (VFC) is proud to develop and provide activities that challenge and inspire growth in all users but with young people as its primary focus. We strongly believe that by creating environments that explore risk then learning is natural and fun and as such we have created a set of policies and procedures to manage the risks to what we believe to be an acceptable level. To remove the risks completely removes huge elements of the key learning so the control measures set in this policy are a balance we believe sits between absolute safety and rich, lifelong development.

Through consultation with our staff, service users and external professionals we have created a set of Normal Operating Procedures (NOP, this document) that govern how we operate our activities and also a more general set of policies and procedures (policy folder) that apply to all aspects of delivery.

Our staff are well trained and some are very experienced. To meet service user's needs, we at times operate activities that are not normal. We actively encourage staff to think creatively and put our services users at the heart of their delivery and in these situations bespoke risk assessments, lesson plans are agreed with the Centre Manager.

This document outlines the centre wide and activity specific requirements in the form of Risk Assessments, Normal Operating procedures (NOPS) and Session Plans and how we would normally expect to operate.

Tony Baker

Centre Manager

Updates

Version	Date	Update	Updated by
1	29/3/21	1.	TB

Risk Management

Process of documenting risk management

- All activities are risk assessed by an experienced Instructor
- From the risk assessment a lesson plan and Normal Operating Procedure (NOP) is written and produced
- A training, assessment and refresher schedule ensures that all staff adhere to this though monitoring and training
- Staff read (and receive training where necessary) the NOP specific to the area of training and agree to work to the written standard

Information flow

- Information flow is encouraged every morning during the morning briefing; information such as new risks, environmental factors and specific hazards relevant to the expected groups can be shared
- The use of email to communicate safety notices and changes to procedures are used as required

Session quality

- Staff are observed daily through “walking the floor”, this is a snap shot observation of a variety of sessions recorded in the delivery diary
- On a more formal basis it is the aim of VFC is to observe a significant proportion of at least one session for every member of the delivery team per year. These will be logged in the personnel file
- Performance and supervisions reviews

Generic Risk Assessments

The following risk assessment are relevant across all activities and support the activity specific risk assessment and Normal Operating Procedures.

Risk Assessment	
Hazards	• Communication • EAP and Absconding procedures – On and Off site • Equipment • First Aid • Inspections • Medication • Site safety and Terrain • Staff • Technical Advisors • weather

Communication

Risk	Who it effects	How is this controlled?
Injuries worsening through poor communication between staff on site	Staff Guests	• Instructors on site have access to radios to enable communication to the office • Staff are encouraged to carry personal mobile phones which will be turned to silent during delivery
situation becoming worse as sensitive information communication relayed on a general frequency is heard by non-essential staff and participants or the channel is block due to general chatter delaying an emergency response	staff and guests	• Radios have allocated channels for communication: ○ Channel 1 – open channel with BF Adventure ○ Channel 3 – dedicated VF channel ○ Channel 4 – general communication of non-sensitive content ○ Channel 2 – incident, accident and emergency channel ○ Channel 5 – general chatter channel for long communications

EAP

Emergency action plans at VFC have been developed to deal with possible emergency scenarios and include the following:

- Accidents
- Incidents
- Staff are familiarised with these procedures and sign to say they have read and understood them.

Emergency action is also a part of activity Instructor training at VFC where Instructors practice scenarios specific to each discipline.

The next page highlights the action to be taken by instructors in the event of minor and major emergences on and off site.

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VFC Emergency Action Plan 2012

Minor Accident

- Cuts
- Grazes

Major Accident

Broken bones; Head Injuries; Anaphylaxis; Drowning; Major cuts; Back injuries ; Chemical spills; Death (please see action in the event of a fatality)

Action

Administer first Aid and continue with session

Action- On site

1. Assess situation
2. Ensure the safety of yourself and the group
3. Call for assistance on the radio (VFC office) or by telephone (01326 340 912)
4. Request the conversation move to a secure channel - provide details of accident, location, people involved and anything else relevant
5. The office will call emergency services providing them the information listed above.
6. The office will collect the medical form from the groups information
7. Staff to evacuate the individual as per training
8. Group evacuation should be considered this will be via the quickest and safest route depending on the situation. This can be guided by the group if appropriate or led by another member of staff
9. office to organise a runner to meet emergency services at the entrance to the site and escort them directly to the casualty
10. Administer first aid until relieved
11. Inform Centre manager / Deputy /CEO

LOG

Fill in the accident form located on the company drive and email to the centre manager

- **Accident**- for injuries sustained at VFC on and
- **RIDDOR** - for injuries that required the casualty to seek further medical attention

Never discuss any accident with the press or third parties until cleared by the centre manager / CEO to do so

Contact Numbers

Centre manager-07833 096 875, 01209 842 523
CEO- 07851 152 324, 01872 571 680

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Critical Incident Plan (CIP)

Is this a Critical Incident? Does it:

- Involve multiple casualties?
- Involve, potentially serious life changing injuries?
- A fatality?
- An incident that could attract the media or play out negatively on social media
- A serious near miss like a major rock fall

Follow EAP procedures

SMT contact List

1. Tony Baker (CM) 07833 096 875
2. Adrian Richards (CEO) 07466 381 44

Stabilise the situation as per NOP

- ☐ Casualty care
- ☐ Staff care
- ☐ Group care

Contact the DM

Use the radio, phone or if offsite the agreed method of communication

The DM will now coordinate the incident

Assess the situation

- ☐ 0-15 minutes
- ☐ Find out who, where, why, what and how
- ☐ Allocate staff to optimise immediate casualty care

Contact a member of the SMT

This should be done at earliest opportunity. Use this contact list to send a bulk text to notify all SMT and follow up by a phone call working from Top to bottom.

Stake Holders

- ☐ Insurance –contact within 1 hr
  - 123456789
- ☐ Trustee – contact chair 2 hrs
  - 1111111111
- ☐ Group lead – within 30 minutes
  - 44444444444
- ☐ School Head – within 30 minutes
  - 55454545
- ☐ Other group leads – ASAP post incident
  - 45455455757
- ☐ Upcoming groups – ASAP post incident
  - 4545544545654
- ☐ AALS – ASAP post incident
  - 455445645645645
- ☐ Technical Experts
  - 11445566998877
- ☐ RIDDOR
  - HSE website

Manage incident

See notes on the next page for more information

- ☐ Casualty (first aid, next of kin, medical forms)
- ☐ Staff (wellbeing, physical, redeployment, suspension, isolation, briefings, non-working staff)
- ☐ Group (immediate, scheduled, adjacent)
- ☐ Stake Holders (see list Above)
- ☐ Emergency Services (preparations, rooms, refreshments etc.)
- ☐ Media (social media, staff briefing, prepare statement, consider space for interview)
- ☐ Paperwork (reports, timings, witness statements, photos, time line)
- ☐ Equipment (isolate, take pictures)
- ☐ Site (make safe, make secure, consider confidentiality, public)

Casualty Care

In all CIP, immediate care should be made towards the casualty and those in the group immediately effected.

- First Aid – consider having multiple FA staff on scene to assist, support, advise and take over on a case by case basis. Having multiple FAK's on site can be useful in a major incident.
- Comfort – consider blankets, spare clothes, shelter to keep the casualty warm and comfortable
- Dignity- consider who is in the environment, clothes to preserve the dignity of the casualty
- Next of Kin - Work with group leaders (if appropriate) to contact the next of kin. Communicate within all involved that VFC and the group lead will jointly coordinate this to prevent miscommunication. Only pass on facts, be sympathetic and act with casualty's best interest at heart
- Gather medical forms in preparation possible next steps
- After care – moving people to other places such as hospital or home should be done at VFC expense and without question or hesitation. This includes shuttling group leaders to hospital if required. This shows VFC are supportive, compassionate and working hard with the injured person's best interest.

Staff

Incidents can be very traumatic for staff involved. The emotional wellbeing of the staff is a high priority.

- Wellbeing – consider time off, redeployment and professional support I the event of a major incident. Individual and whole team briefs can capture learning and be of great support if done correctly
- Physical - Staff may be exhausted or injured; factoring staff to cover their session and making arrangements for them to seek professional support / care / advice should be given priority.
- Redeployment- Assigning light duties or moving effected staff to another session can relieve stress and improve the quality of the situation.
- Suspension – if the incident is related to "gross Misconduct" then immediate suspension can be set in place to remove the staff from the site. This could improve the situation by avoid accidental contact from staff with the affected parties.
- Isolation – staff may need a moment to collect their thought should the incident be traumatic. Time away from other maybe on their own or with a peer can be used to purchase time, collect thought or for them to relax a bit.
- Briefings – communication is going to be key. Pulling staff together for an early update of the facts, current and future actions will avoid miss communication and settle people nerves. Using the radio set to a "non-public channel" can also be used to keep staff up to date but be aware, information communicated over this medium can easily be overheard by guests and clients so this should not be sensitive information. Please also refer to the stake holders and media notes.

- Media - Staff should also be briefed that the media may well turn up on site to ask questions or make calls and staff should be prepared for this and to refer ALL questions to the DM or the SMT managing the incident.
- Non-working staff – informing by email / text / calling staff on a day off or freelancers that an incident has occurred will help keep everyone in the loop and should be considered post event.

Groups

The ripple effect of a CI can have a negative impact across groups on site and groups visiting. These should be considered:

- Immediate group – friends and teachers that have witnessed the incident may feel very scared, let down, sad, angry, worries, stressed etc. Care should be taken to attend to their needs. Good contact and factual information updates, inclusion in reports, made conformable, alternative / adjusted programmes and in some cases, transport home at VFC's expense should be arranged. Support in contact head teachers and or parents should be offered in a sympathetic way and should be done following the stake holder and media notes.
- Other groups on site – the word may have spread that a CI has taken place and they may be worried about safety or their programme changing and the impact on their group. All group leads should be briefed on the situation and adjusted programmes created if appropriate. Some group may want to leave site and this too should be facilitated by VFC.

Stake holders

There are various bodies of people we need to keep informed, these are:

1. Insurance

Zuric will need to be notified of a major incident with the first hour as this can protect our information and internal investigations under privilege and we can start taking advice on ways to manage the incident.

- Contact number
- Policy number
- email

2. Trustees

The chair of the trustees should be contacted as a board there may be a specific method in which they want the incident to be handled and they can choose their level of involvement. This should be complete ASAP post incident

- Name
- Contact Number

3. Group leader of the affected group

These should be contacted ASAP after making sure the casualty is being seen to. Through this the aim is to control the situation so we get the best outcome in the quickest timeframe, this should include:

- Controlling information flow – other teachers, students making calls with limited information or posting on social media leading to the stationing worsening and the story getting out of hand. This could have implications such as the parents finding out about false information or the press arriving as it triggers a google alert from a social media post.
- Reallocating resources, adjusting programmes – this can be discussed and actions set in place quickly
- Reassurance that VFC are working hard to get to the best possible outcome – having them in the loop from the start will help with reassurance
- Support with report writing reports – this will help get the all the facts required like DOB, addresses etc. onto the report and also keep the lead teacher in the loop

4. School Heads of the effected group
    - Contact the school head teacher directly shows we are compassionate and also offers a great opportunity for clarity. Calls should be sympathetic and follow notes on media contact and stake holders. This should be done as soon as the situation is under control as parents will need to be contacted and after care provision set in place.
5. Visiting schools heads of other current groups or service level providers
    - It's important to nip in the bud any damaging information before future visitors hear about it. Being seen as professional and proactive is key for future business. This should be done post incident following a drafted email proofed by the SMT.
    - Other stake holders such as service providers and referrers for core should be contacted for the same reasons as above
6. AALS
    - This is not a requirement but a courtesy email from us will be useful for their records and show us as being proactive and professional
7. Technical Expert
    - The TA for the activity should be contacted to advise them of an accident as they may require to make adjustments to training or see records to ensure any previous recommendations are being followed.

Emergency services

Police- they may choose to perform an investigation and attend site. Staff should be prepared to welcome the police and assist them. They may need to have interviews with various people involved with the incident including staff, participants and people not involved. Their job is to prepare information to present to the local authority should an investigation needs to take place.

Note: Our insurers if contacted early may instruct us not to hand over information to the police as it becomes protected by privilege once the insurance company have been instructed. It is illegal to withhold information from the police unless it is protected by privilege. Police could potentially take

anything they want including hand written notes, equipment, data files, photos etc. so exercise consideration to how you and other staff make notes in the first instance.

Fire and ambulance – easy access should be made and if available, staff allocated to escort them from the site entrance to the scene of the incident. Again, refreshments and making them feel welcome can go a long way.

Media

The media such as press or social media can have devastating impact on the charity and business if handled poorly. Places that have had CI's in the past have proven than the Media presenting the incident to the public has cost organisations huge sums of money from loss of business and reputation. As well as negative impact from the casualty point of view as their and their families' privacy can be hugely invaded and detrimental to them personally. The person managing the CI should follow the below guidelines when dealing with the media:

1. Manage communications
    a. From initial incident remove all unnecessary people from the area to avoid photos being taken and posted
    b. Brief all users not to post on social media or send texts until the incident is managed. With young people it may be worth asking for phones to be handed over if appropriate to do so
    c. Brief all staff to direct all communications to the designated coordinator
    d. Be aware of your environment when talking to the press. Consider the background, the general situation and the message you want to portray. Staff talking to the media should attempt to control the narrative
2. Compassionate
    a. Remember people are going to be effected so a human heart felt response is more than appropriate and needed.
    b. Liability cannot be placed in UK law for and apology made in any manner. Communications and press releases should include something like:
        i. *"our thoughts go out to the <<injured person's name>> and their family and we hope that they make a full recovery."*
3. Considerate
    a. Remember, the media will work hard to get details to build a workable story. We have a duty of care to the injured person and our groups and their families and should do everything in our power to promote a positive outcome. This includes safeguarding their privacy.
    b. Keep names, incident details, locations, hospital, school name, ages etc. from any initial reports until the SMT have considered is response strategy. This should form a suggested response:
        i. *"We are saddened that today at <<TIME>> an incident occurred at VFC that unfortunately resulted in a visitor becoming injured and being forwarded for medical assistance.*

            At this time, we are looking into the incident and performing an internal investigation. We have contacted the school <<or parent / other stake

holder>> and parents of the injured party and will be focusing all our efforts on their needs and wellbeing. We will release more information once we have completed our investigation."

4. Factual
    a. The smallest amount of misinformation can be interpreted and manifest itself having huge negative consequences. When communicating to the press avoid things like "we think…", "we believe…" and "it's likely that…"
    b. It's better to produce fewer information that is factual
    c. Be precise with information. For example see red below:
        i. *"currently we are still looking into the incident, what we know for certain is at <<TIME>> that an injury occurred as part of our normal programme resulting in our of our scheduled visitors needing to be forwarded to professional medial support. "*
5. Consistent
    a. Misinformation can escalate a bad situation and lead to confusion and stress with people like parents and head teachers. Being consistent is key to good incident management.
    b. It's important for clear leadership and where necessary be coordinated by a member of the SMT as soon as possible.
    c. All information and communication should be through this designated lead. This can be either by interviews on TV or over the phone, by a press release or on social media. As a guide, this is a template message:

27/1/19 16.53 Press release

We are saddened to say that today at 1230, an accident occurred at VFC resulting in one of our visitors receiving an injury and was taken to hospital for medical treatment.

Currently we are working with the visiting group and the injured person's family to get them the care and privacy they need to get the best possible recovery. We are looking into why the accident happened in the first place and we look forward to collaborating with the local authority to draw conclusions and take on board any learning we may be offered.

We pride ourselves on our excellent safety record and the care we place on all our visitors so will look into this matter as our highest priority to ensure something like this never happens again.

Our thoughts and feeling go out to the injured person and their family everyone at VFC wish's them a speedy recovery.

Equipment

Risk	Who it effects	How is this controlled?
Equipment failing due to improper storage, maintenance, inspections and or use leading to injuries to users and participants	Staff, guests	• All equipment operated at VFC (activities, office and maintenance) will be operated as described in specific risk assessments • Legislation governing the use of, inspection and or maintenance will be followed and logs kept accordingly • Only the people assessed as safe will be able to use the equipment unless express authorisation is granted by the Centre Manager
Activity equipment failing due to improper checks	Staff, guests	• Equipment is checked every term and during the summer holidays by designated and competent staff • Logs are kept for future reference
Unauthorised use of equipment leading to injuries	Guests and the public	• All equipment will be stored and locked away at the end of the day • When equipment is not in use during the day reasonable measures should be made to make the activity inaccessible to unsupervised service users and members of the public • Any equipment likely to cause will be secured when not in use

First Aid

Risk	Who it effects	How is this controlled?
Injuries worsening due to staff not knowing first aid	Staff Guests	• All the instructor team must have a current and valid first aid qualification • At least 50% of the office staff will hold a valid first aid qualification
Lack of adequate first aid supplies leading to injuries worsening	Staff, Guests	• All instructors staff to carry first aid kits • Large first aid kit to be located in the main office • First aid kits to be checked half termly to ensure they are adequately stocked up • Personal first aid kit are issued to staff who work frequently, these are constantly maintained by the staff being issued with them and checked in line with our standard first aid kit checks

Inspections

The following inspections at VFC take place on an annual basis:

- Type C inspection for the zip wires

Medication

Risk	Who it effects	How is this controlled?
People experiencing difficulty due to personal medication not being made available / pre-existing medical conditions causing injury	Staff Guests	• Guests are required to complete a medical form prior to sessions and are expected to carry medication • Staff are required to complete a personal information sheet and list medication on this • Activity and challenge are to be suitable for the participant
Administration of medication being inadequate due to lack of training leading to conditioning worsening	Guests and staff	• VFC staff are not qualified to administer medication so users of the site need to take reasonable precautions while at VFC • In certain circumstances authorised by a manager, staff can administer medication if a medication sheet has been completed
Unsecured medication being misused by service users leading to illness and injury	Guests	• All medication to be carried by service user or group leader • Staff are not normally expected to carry medication unless pre-arranged with the service user • Medication can be stored in reception in a secure cupboard but is done so at the services user's own risk
Misuse / administration of medication causing harm to service users	Guests	• All medication on site needs to have a VFC medical form completed. Actions and advice must be followed and only people with the stipulated experience / training / permissions can administer medication.
Administrating paracetamol and ibuprofen to young people leading to over doses and illnesses	Guests	• In normal situations VFC does not administer any medication unless a medication form has been completed. On single day adventures any taking of medication can be delayed until the young person return home.

Site safety and terrain

Risk	Who it effects	How is this controlled?
Sprains and twisted ankles due to poor footwear	Staff Guests	All guests on session are informed and all staff adhere to wear the following shoes on site: Acceptable shoes on site are: • Trainers • Boots • Wellington boots The following footwear is not acceptable and must not be worn by anyone staying on site: • Flip flops • Open toed sandals e.g. 'reefs' • 'Espadrilles' i.e. canvas shoes with rope soles • Crocs
Being hit by cars in the car park leading to impact injuries	Staff, guests, visitors	• Speed signs placed on work shop on the entrance to the car park
Slipping on decking leading to falling injuries	Staff, guests and visitors	• Decking outside reception is no slip decking
Unauthorised access by members of the public leading to theft, safeguarding incidents and customer discomfort	guests, staff	• Gate is locked when staff are not on site, normally between 1700-0800 • Signs placed on all access points to the site make people aware that its private property • All visitors need to sign in at reception and require an ID badge • See residential risk assessment for security measure during residential stays

Staff

Risk	Who it effects	How is this controlled?
Injuries to guests due to inadequate staff skills and capabilities	Staff Guests	• Staff running sessions will have training / inductions in line with the activity NOP • On recruitment staff will be selected based on their experience, attitude and references • Staff are monitored regularly to ensure NOP are bring followed • Supervisions, 6 month reviews and annual performance reviews provide a structure of feedback for staff • Training is planned at regular intervals throughout the year
Guests and staff having a negative experience resulting in misadventure and physiological damage	Guests Staff	• VFC will operate a "Challenge by Choice" policy which puts users in control of their adventure. • Staff will receive basic training with this • Staff will be monitored and feedback provided
Instructors accidentally becoming injured during activities	Staff	• There will always be at least 3 staff on site so should an instructor become injured help can be raised by the instructor or the group.

Lone working

Risk	Who it effects	How is this controlled?
Staff getting stuck / injured on the course and the lack of peer support leading to major injuries or death	Staff	• Staff to access in pairs in the canoe quarry • Staff can access the ADQ within line of sight of a trained instructor • Rescue bag to be carried • Radio to be carried

Technical Advisors

A technical Advisor is someone with a recognised level of specific expertise, higher than is required for leading or supervising an activity at the level offered.

Weather

Risk	Who it effects	How is this controlled?
Injuries worsening due to inappropriate clothes being worn	Staff Guests	• Groups sent out a suggested equipment list before arrival to VFC

		• Staff have access to uniform (coats, waterproof trousers) • Weather forecast obtained in the morning briefing and staff informed. Issues and activity concerns and or restrictions communicated in the morning briefing
High winds causing branches to fall leading to impact injuries	Staff, guests	• Sessions called off in high winds. Direction is a key factor as the course is usually very sheltered in most wind conditions, staff will base any decision based on how the prevailing condition are "actually" effecting the course and people ability to access the course safely.
Lightning strikes striking people leading to injuries and death	Staff, guests	• Observing a lightning strike activities are to cease for 20 minutes or until the "go ahead" had been authorised by a manager
Cold and snowy conditions leading to hypothermia	Staff and guests	• Conditions below freezing points are to be considered individually based on the following circumstances: ○ Age of group ○ Group background ○ Activity in question ○ Subsequent impact on resources (frozen pipes, iced up roads, activity closures) ○ Equipment available ○ Learning outcomes
Hot weather leading to heat exhaustion and heat stroke	Staff and guests	• Water taps positioned around site • Shelters and group spaces available • Clients advised to wear sun tan lotion • Programme pitch and pace changed to match groups ability
FOG		• Staff to maintain line of sight with the group at all times • In level 2 and 3 supervision areas, if staff cannot see the group they must position themselves with the groups to maintain line of sight • When walking around he top of the quarries in fog, staff must be attached to a safety system at all times • Zip operation where the instructor cannot see the exit ramp can only happen if there is a second member of staff at the exit ramp with a radio to ensure the zip is clear.

Normal Operating Procedures

The following procedures are run alongside the general risk assessment located in section 3 of this folder

Normal Operating Procedures	• A quick list of must do behaviours that are present during a session
Session Plan	• This details the framework in which the risk assessment and NOP are produced from. All sessions should operate within the framework
Risk Assessment	• This details the process of how risk is managed on sessions

Via Ferrata Adventure Zone and classic tour

Location	VFC, Goodygrane Activity centre, Halvasso, TR10 9BX Canoe quarry		
Assessed by:	Tony Baker	Date	28/2/20
Reassessed by	In 12 months from the above date		
Supporting policies	Generic NOP		

Normal Operating Procedures summarised from Risk assessment	
Experience Training and Qualifications	• In house trained • Externally assessed by MIA
Ratios:	• 1:16 in adventure zone (level 1 and 2 supervision) • 1:30

Safety factors	• PPE- checked and fitted by staff
	• User restrictions:
	  ○ Age – 8+ (10 in the classic tour pending competence check in adventure zones)
	  ○ Height – min 113 cm
	  ○ Weight max – 18 stone
	• Briefing and competence is mandatory – see lesson plan
	• Weather:
	  ○ FOG – staff must be able to have lone of sight with users at all times
	  ○ Wind – cancelled in winds over force 5, awareness of impact on zip with easterly winds

Operational Factors	• Daily checks before use – logged in VFC diary • Maintain PMU • Check medical information • Check acceptance of risk and wavers
Accessible Factors	•
EAP	• See EAP at the start of this document

Equipment and Venue	
Safety equipment	• FAK, Radio, • Rescue bag (checked before use) • Cows tails • Safety hook tool • Work position system • WAH harnesses and helmet • Uniform • Zip trolley

Kit for Participants	• eldered radius comp harness • helmet • lanyard and safety hook
Set up notes	• staff to carry (or position, see risk assessment) rescue bag • set up access lines • print off course information 1 hr before

Lesson Plan	
Aims and objectives	• safe experience • fun and challenge
Time	• adventure zone 1.5 hours • adventure zone and classic tour 2.5 – 3 hours
Equipment needed	• see equipment and venue
Set up notes	• see equipment and venuw

Briefing	• **Café brief**
	  ○ **Intro**
	  ▪ Name and identify yourself as their instructor
	  ▪ Check activity
	  ▪ Check paperwork (tick in)
	  ○ **hospitality**
	  ▪ Clothing, footwear and carriables
	  ▪ Toilet
	  ▪ Boundaries
	  ▪ Photo
	  ▪ smoking
	  ○ **Medical and covid** – back, asthma, epilepsy and heart conditions
	  ○ **Company** –
	  ▪ thanks, your are supporting BFA
	  ▪ bfa supports at risk young people
	  ▪ you may see these YP round site, watch language etc
	• **Kit store brief**
	  ○ **Risks** – have been significantly reduced but are not eliminated
	  ○ **Kit adjustments** – only by instructors
	  ○ **Fitting of equipment**
	• **Training platform**
	  ○ **CBC** and opt out and refund points
	  ○ **Parental supervision**- parents in centre and able to assist
	  ○ **Operating brief**:
	  ▪ Lead with safety hook – keep high and demonstrate a bad fall

	▪ Show how to pass "zaza's" and operate hook ▪ Explain junctions ▪ Listen and follow signs ▪ How to raise help – instructor romes ▪ Self help ▪ Lean and dangels ▪ 1 per crossing • **Traverse to oak tree** o Same as operations, **staff to**: ▪ Observe ▪ Question ▪ Ask for demos (lean, dangle, "INSTRUCTOR") o **Tips and techniques** ▪ 3 points of contact ▪ Long arms ▪ Rest points o **Rest points** – make best use of •
Main delivery	• 60 – in pairs check and set up the VF • 30 – meet and greet, fit equipment make way to training area • 30 – briefing, training and make way to oak tree • 30 – make way from oak tree to café over the suspension bridge • 5 - After the adventure zone assess competence, complete the skills checklist with the group • 5- Have a small break before going to classic tour • 60 -Allow the group appropriate space on classic tour, re check PPE • 30 – finish with zips and make way back to café
Summary	• Gain feedback • Congratulate all users • Promote other products
Pack away	• Unpack rescue bags to air • Store all equipment, separate damaged equipment • Log, upload and store paperwork • Feedback in the diary notes for tomorrow and check staffing and tomorrows sessions
Other notes	•

Risk Assessment for VFC adventure zone and classic tour	
Hazards	• Anchors • Wire • Stapels • Postman's walk

	• Top cliff safety systems • environment • falling • PPE • Users • Staff • Rescues • Water • Zip • Bridge • Paths • Cliff edges • Café • Wildlife • Vertical access • Rocks and quarry faces • Unauthorised access

Anchor points

M16 A4 studdintg set into granite rock with Rawl kemfix II codue + brackets zaza2. Set into anchor with a minimum depth of 125mm,

brackets individually ID "A XX"

Install depth	Min 125mm
Hole diameter	18mm
Chemical anchor	R-CAS-V-16
Torque setting	80NM
material	A4

Anchor points breaking resulting in significant to falls from height and the weight of the system on the 2 adjacent anchors. Possible multiple participant injuries and the safety cables move significianetly		• M16 threads have a **sheer pull**, **recommended** load when imbedded at **the minimum depth** of 100mm for A4 steel of 25.2KN • M16 threads have a **tension pull, recommended** load of 24KN at the **minimum depth** of 100mm for A4 steel • All points pull tested to 800KG • Anchor points set in at the minimum depth of 100mm • Install studs have a visual blue line marker to identify when correct instillation depth is reached • Codue + instillation instruction followed • Daily pre course checks • Operational checks at last every 2 months • Annual inspection

Over loading leading to anchors breaking resulting in significant to falls from height and the weight of the system on the 2 adjacent anchors. Possible multiple participant injuries and the safety cables move significantly		• Participants max of 3 between anchor bolts for the purpose of rescue, normal operation 1 x adult with 1 x child • Bolts spaced 5-10 meters apart (15 M is max) • Sag to span set at 1:15 • Estimated weight on each anchor based on 3 x people weighing 80KG (240KG), hanging from the safety cable is 600KG KG. figures are estimated as the anchors heights, sag and span vary depending in the route and the instillation area • Anchors tested beyond this limit to establish a secure instillation. The test limit is above the estimated maximum load of 600KG (see above) but far less than the design load at the recommendation of the manufacture (RAWL) • Anchors are connected to adjacent wire to add redundancy to the system (with the exception of the end anchors) • Weight limit set to 115 KG (18 Stone) • To avoid overloading any single anchor point, rescue practice must not involve 2 rescues on adjacent wire sharing the same anchor point.
Nuts coming loose		• Nyloc nuts to be used and tightened to 80NM • Tighten using torque wrench • Visual inspection daily and tighten as necessary
Resin being faulty / installed incorrectly		• Product info followed • Load test on safety critical points to prevent falls from over 1 M • Anchor points (AP) numbered for easy reference • Daily inspection (not logged), and faults or concerns reported • Termly inspection (internal logged) • Annual inspection by external company • Sample instillation evidence by photos of drilling, clearing (blow and brush) the hole, depth of hole can be located in the build book

Safety cables **12mm wire rope, installed as per codue + instruction to brackets using 3 x 12 mm wire rope grips or 2 x 12 mm ZAZA jaws. Wires individually ID with serial number**		
Breaking resulting in critical failure of		• 12mm wire rope used with 7.12 TONNT MBL • All points checked daily by staff for signs of wear and vandalism

safety system possibly resulting in a fatal fall from height		• Operational check at least every 3 months • 12 months inspection by engineer
Abrasion on rock resulting in weak points and breakages leading to possible fatal falls from height		• Extra brackets used on corners to bring the wire rope away from edges where possible • The course installed to limit potential wear points • Course checked daily • Full internal inspection every 3 months • Full annual inspection • Blue piping used on areas of high abrasion to protect the cable
Cutting hands on wire rope		• Risk is small • Clients advised of risks of holding onto the wire rope • Gloves to be worn

Incorrect attachment to the safety system resulting in compromised safety possibly resulting in significant injury or death	participants	• Coudou pro system used which is a category E system as defined by the UK ropes course guide which mean that once attached, participants need a tool to remove themselves from the system
		• Participants should be attached to the system by a trained instructor
		• Participants can remove themselves from the system but a system should be in place to prevent re attachment to the system where a trained instructor is not in a position to check the attachment.
		  ○ Adventure quarry – this is manned by a member of staff who will supervise the exit and prevent re entry. This is done though the placement of a safety hook on the system on the wire that required a tool for its removal
		  ○ Canoe quarry – the exit is at the entrance to the zip wire, this is another locked exit requiring a tool which the staff have to exit. This is overseen by the zip member of staff.
		• Traditional cows tails and lanyards can also be used. Care should be taken to select an appropriate system to ensure compatibility.

Rusting on wire rope leading to breakages and potential fatal falls from height		• Daily usage checks • 6 week logged check • 12 months inspection • Replace as necessary • Wire installed in 25M sections
Incorrect cable height leading to injuries sustained during a fall onto the system and impact with		**The adventure zone and classic tour** will have a safety system at a height above the users attachment point as illustrated below. People under 40KG will not generate enough force to deploy the energy absorber. As such no one will require an energy absorber as all lanyards are above attachment point height.

other other users.		See diagram below from extract of petzl JOKO Y  • Mini wire height set at 107 CM • Max height is 140 too allow the smallest 0.4 centile 8 yr old (113cm) to reach the safety cable • Routes below 3 meters should be designed so minimise the impact of a ground impact
Falling onto the safety cable and sliding down to the natural low point. Possible impacting other users and possible bumps and bruises from impacting the rock or staples	Participants	• Users set at 1 per wire rope unless supervising children in which one can be supervised • Sag to span set to avoid minimum sliding • The angle of climb is set low • Where there is a chance of sliding, coudou pro stops will be used or additional anchors set in place to remove the sag and the chance of sliding
High fall factor falls leading to injury to participants and critical damage to equipment	Participants	• The course is designed to operate below the safety cable to facilitate very low fall factors • Participants need briefing about this risk

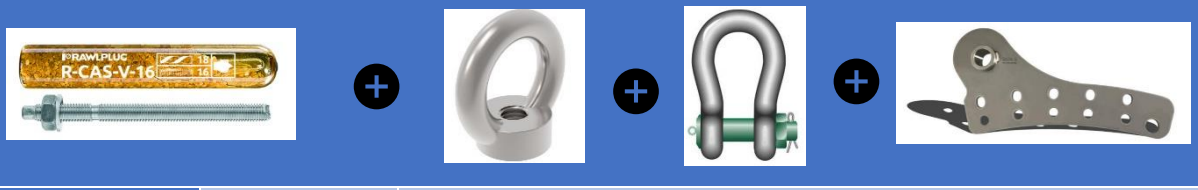
Stapels

16 mm factory made galvanised rebar stapels 1000mm long set 75mm (minimum install depth) into granite from Deveron metals

Stapels breaking and coming loose resulting in a fall onto the safety system and impact injuries at height		• 16 mm galvanised rebar used and used wildly in other via ferratas • Daily observation • Operational check at lest every 3 months • 12 month inspection • Not to be used as a primary safety system as not tested • Stapels secured using Rawl Chemical anchors which has a high strength rating • Positioning and resting lines can be attached to these staples • Stapels inserted min of 75mm into rock minimum
Stapels rusting leading to structural failure		• Rebar is galvanised
Stapels cutting hands		• Risk is moderate • Gloves must be used • Clients advised at time of booking of risks of small cuts, abrasions and sores
Sores and slipping off stapels		• Good shoes / hiking boots / wellies to be worn • Participants made aware at time of booking and during registration process

Postmans walk **12mm galvanised wire M16 A4 studs capsule R-CAS-V-16 (SEE ANCORS) set, to A4 M16 ring nuts. Swaged at one end and wire rope gripped at the other to allow for on going adjustment**		
Slipping on wire rope resulting in impact injuries	All users	• Wire rope to be set at a sag to span of 1:10 to minimise the angle of the wire rope to reduce the chance of slipping • Good shoes to be worn
Equipment failure due to overloading and or poor material choice	All users	• M16 anchor stud (see anchor instillation) • Wire rope is suitable (see construction for properties) • 1 x adult and 1 x child on the element at a time
Falling due to in balance	All users	• Participants to use the safety cable as a hand rail to aid balance • No tight rope walking allowed

Suspension bridge

Coudou pro zip 5 installed at either end of the suspension bridge safety cable and supporting (note: Safety cable - VIA plates off the suspension bridge vertical wires which are suspend from the load baring suspension cables) 		
Overloading the attaching component leading to failure, deformity and possibly a fall from height	All users	• Anchor is a M16 A4 stud, chemically anchored at a minimum depth of 125mm using RAWL R-CAS-V-16, see anchors for more information • Attachment to the stud is an M16 A4 eye nut • 2 tonne lift shackle attaches the eye nut to the zip 5 plate • The zip 5 can span a 150 m gap with one person • The zip 5 alone can support 25KN • Overall weight limit of the suspension bridge is set by High Time TC and has been rated at 10 people • VFC has chosen to operate with a maximum of 5 clients • Additional VIA plates are suspended along each of the vertical load baring cables

Restraint safety system set at top of cliffs to prevent a fall from height using 12mm wire rope, junctions and vi plates		
Zip wire loop – finishing the zip and coming off the system leading to falls from height and reattaching incorrectly	Participants	The end of the zip wire connects back into the top system using a junction resulting in a continue attachment scenario
Accidental re-attaching to the system post zip wire	Participants	The exit is controlled by the instructor at the zip launch end. No one can fully exit or enter the system without the instructors physical intervention
Adventure quarry safety system	participants	The walk along the exposed cliff edge is protected by a restraint system preventing a fall from height

Environmental factors

Heat related injuries		• Participants advised to drink plenty of water on hot days. Drinks can be purchased in the café and water can be left in locations identified by staff but not carried on the course • Participants to wear t shirts
People slipping off when the course it wet		• Good shoes essential • Participants advised that the course could be slippery where appropriate • Safety system in place to prevent a fall from height • Helmet worn to protect the head during a slip
People getting cold or wet during the course		• Participants advised to wear warm clothes / coats as long as they don't interfere with the fit of the harnesses • Information on what to bring will be emailed out on booking a course
High wind effecting the natural usage of the course		• Session will be stopped in Sessions called off in high winds. Direction is a key factor as the course is usually very sheltered in most wind conditions, staff will base any decision based on how the prevailing condition are "actually" effecting the course and people ability to access the course safely. • The zip and Burma have different operating conditions, see the specific risk assessment

Falling		

Participants falling leading to impact injuries and or death	Participants	• The course is designed to have the participants attached to a safety cable from start to finish. Exiting the system can only be done by completing the course, accessing a designated exit point located in a safe location or removal from the system using a specialist tool only held by instructors.
		• Participants are checked by a trained member of staff at the point off attachment
		• Harness chosen have automatic locking buckles so if clients do adjust the harnesses they can not be rethreaded incorrectly
		• Harnesses checked at start and at intervention points these are:
		  ○ Start of classic tour
		  ○ Start of zip wire
		• Reputable system of safety used
		• Pull tests carried out on all anchors at start of build
		• Daily and termly and annual inspections carried out

		• Training from staff and competence checked • Participants cannot reattach themselves as the course will be secured using a safety hook over the wire at all entrances and exits which can only be operated by staff
Inversions in a harness leading to discomfort and the possibility of falling "out the harness"	Participants	• Full body harness have been chosen to prevent this

PPE		
PPE failing leading to falls from height	Participants	• Staff trained on how to fit and check equipment at the point of training. This is an assessed criteria • PPE checked visually by staff before each use • PPE checked every 3 months by a competent and trained member of staff, these will be logged • All fault PPE will be placed in the second opinion bin were a senior member of staff will decide the next course of action • Participants briefed not to alter or adjust equipment • Manufacturers recommendations will be followed
Incorrect storage leading to failure	Participants	• PPE stored in dedicated shed away from chemicals, UV light • Equipment stored on purpose made racks to allow air flow for drying • Low level heat source in constant use to eliminate damp from the storage shed
Incorrect fitting leading to falls from height	Participants	• 2 sizes of harness are available • Staff trained on how to fit these
		•

Users		
Landing on other users resulting in impact injuries		There are 3 places where falling from the course may result in an impact worth the users below.

		• Signs are placed to warn against this and to only proceed when the top route is clear • This is a briefing criteria and competence checked before moving to the classic tour
Frustration from bottle necks leading to overloading of elements		• Staff trained to "stack" participants using their best judgement with the most confident people at the front of the group
Not understanding training leading to dangerous occurrences		• The briefing is tactile, pictorial and practical allowing users to take on information and for staff to observe competence
Children not being supervised correctly getting into distress and stuck.		• Children aged under 18 years old must be accompanied by an adult. Person aged 18 or above who is either the parent/legal guardian or has the authority of the parent/legal guardian of the child participant(s).VFA will set in place adequate training to accompany the child participant(s) and is in a position to see the child participant(s) and intervene verbally • 8-13 yrs 1 adult to 2 children. Adult to be placed in the centre of the children to enable support to be provided to both children • 13-18 years – 1 adult to 7 children • Children to use longer lanyards (70cm TBC) • The training zone is for children 10 years and over. They can book on the full classic tour if competence and confidence is apparent then the instructor can permit 8yrs + to participate in the classic tour

Staff		
Skill fade leading to mistakes		• Staff need to retrain every 3 years • Rescue practice at least every 4 weeks or prior to the first session of the day if this period has lapsed
Staff accessing the course poorly or slowly and becoming ineffective in an emergency		• Staff to access on cows tails • Staff to be trained and able to use an adjustable work positioning system • Staff trained in vertical access using a petzl ASAP • Staff must at the point of assessment be confident to access all parts of the course

Staff practicing poor skills leading to incorrect behaviours and practices		• Training will be at least 2 days internally looking at personal competence, briefing, equipment, customer care, NOP and indoor rescue practice • Assessment will be 3 days looking at the above and rescues around the course at height
Poor positioning leading to lack of line of sight and not knowing that participants are in distress		• Staff trained on the position of maximum usefulness (PMU). This will vary depending on the groups and location. Suggested locations to keep a line of sight are: ○ Adventure zone – on the floor up to the oak tree, the new island on the corner by the Burma bridge ○ Classic tour – the island, ladder ledge and the zip wire
Staff not identifiable / visible leading to a delay in participants summoning help		• Staff uniform is orange • Rescue bags carried by staff are bright colours
Having an accident while accessing alone		• Staff to always access a quarry in pairs • Staff to each carry a radio and personal mobile phone

Rescues **See training manual for the rescues**		
Poor rescues leading to fall from height		• 2 rope system used, belay and ASAP line • Staff trained and rescue practiced regularly • All rescues are lower rescues, this is where the staff operating the safety system stays at the top. • In the event of an unconscious casualty, a competent member of staff can be used during the lower to support the casualty. Equipment used for all rescues are rated for 2 people
Lack of available staff to facilitate a full rescue leading to delays and injuries worsening		• 2 staff must always be on site and rescue trained during VFC operations • Should there be an unconscious incident and there is no one on site to act as the competent assistant during the lower then the emergency services have agreed to be involved as standard practice

Slow response to participants in distress leading to injuries worsening		• Participants trained to avoid rescues during the training period by:
		  ○ Being taught to take breaks at the rest points
		  ○ Being shown and taught and the demonstrating competence in leaning and hanging in their harness
		  ○ Participants demonstrate how to pull themselves up from a hanging position
		  ○ Participants encouraged to peer support
		• Rescue bags either carried or placed in strategic locations to facilitate a quick rescue. These must at least be in the quarry (oak tree or bottom of zip wire) if groups are operating in the respective quarry
		• Training time to access the participant in 5 minutes from the alarm being raised
		• Participants brief and demonstrate competence in raising assistance by shouting staff and waving

Staff injuries during rescue		• User weight limit set at 18 stones to protect staff from manual handling injuries during a rescue • Staff to carry work positioning system to create a stable stance. These can be attached to staples as long as their cows tails stay secured to the main safety cable

Unauthorised access		
People accessing the course with out supervision either during empty activity slots or when the centre is closed		• The centre is remote, people would have to make a purposeful trespass to access the course • Signs placed on entrance gates to the site • Signs places on access gates to the activity locations • Signs placed on possible access points to the course • Adventure zone has locked gate at the bottom and 2 gates with signs at the top
Core clients access the course as a form of control or in crisis		• Staff to supervise clients closely and select activities in the ADQ carefully matching its suitability to the clients needs