



# Electromagnetic Field

30/05/2024 – 02/06/2024

Eastnor Castle Deer Park, Eastnor, Herefordshire

## Event Management Plan

Version 2

### Distribution

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### List of Changes

Date	Version	Author	Changes
2023/08/27	1	Russ Garrett	Initial draft for SAG notification
2024/02/28	2	Russ Garrett	Update structure, fire, and medical sections. Version for license application.
TBC	3	Russ Garrett	Catering staff to camp at least 8 m away from stalls.

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## **Contents**

<b>1 Event Overview</b>	<b>3</b>
<b>2 Code of Conduct</b>	<b>4</b>
<b>3 Licensing</b>	<b>5</b>
<b>4 Noise</b>	<b>7</b>
<b>5 Children &amp; Young People</b>	<b>8</b>
<b>6 Water &amp; Sanitation</b>	<b>8</b>
<b>7 Waste Management</b>	<b>8</b>
<b>8 Food &amp; Concessions</b>	<b>8</b>
<b>9 Stewarding &amp; Security</b>	<b>9</b>
<b>10 Communication</b>	<b>10</b>
<b>11 Temporary Structures</b>	<b>10</b>
<b>12 Traffic Management &amp; Parking</b>	<b>11</b>
<b>13 Electrical Installations &amp; Lighting</b>	<b>12</b>
<b>14 Special Effects</b>	<b>13</b>
<b>15 Contingencies</b>	<b>14</b>
<b>16 Fire Safety</b>	<b>18</b>
<b>17 Health &amp; Welfare</b>	<b>20</b>
<b>18 Safety</b>	<b>22</b>
<b>A Lost Child Policy</b>	<b>25</b>
<b>B Site Location &amp; Plan</b>	<b>26</b>
<b>References</b>	<b>28</b>

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## 1 Event Overview

Electromagnetic Field (EMF) is the UK's largest technology-focused camping festival: A non-profit three-day event for those with an inquisitive mind and an interest in science, engineering, technology, crafts, DIY, and computer security. EMF 2024 is the sixth iteration of this event.

Held every two years, EMF can be seen as a cross between a conference and a festival, with talks and workshops on a wide range of subjects across a series of marquee-based stages.

EMF is a uniquely community-run event, with a large proportion of attendees volunteering their time to help run the event. Many people attend with existing community groups which form “villages” around shared interests. Villages arrange their own workshops, talks, and installations in addition to those organised by EMF’s own content team.

EMF provides a high-speed internet connection and WiFi to the entire festival.

Our previous event held at Eastnor Castle Deer Park in 2022 brought 2,800 attendees together for talks and workshops on topics ranging from genetic modification to electronics, blacksmithing to high-energy physics, reverse engineering to lock picking, computer security to crocheting, and quadcopters to beer brewing.

### 1.1 Key Information

Event Open to General Public	08:00 Thursday 30 May – 17:00 Monday 3 June 2024
Event Programme	10:00 Friday 31 May – 23:59 Sunday 2 June 2024
Maximum Site Capacity	3250
Location	Eastnor Castle Deer Park, Eastnor, Herefordshire
OS Grid Reference	SO 74157 38128

EMF is a camping event and the vast majority of attendees are expected to camp on site for the duration of the event. Camping will be within the main site perimeter – there is no separate camping area. No day tickets will be issued, except to a small number of speakers and other guests.

Site capacity includes all staff, speakers, vendors, and contractors. Capacity will be enforced during the event by checking tickets and issuing wristbands to all persons on site.

### 1.2 Changes Since 2022 Event

EMF 2024 will be broadly similar in layout and operation to the previous EMF event held at the same site in 2022. Specifically:

- Maximum capacity will be increased from 3000 to 3250 total persons on site.
- Site boundary will remain approximately the same.
- Number of music stages will remain at two, with similarly sized sound systems.
- Number of bars will remain at two.

### 1.3 Demographic

EMF events have historically attracted a broad spectrum of attendees due to the variety of talks and workshops available. The audience demographic is expected to range in age between 18 and 50, with the majority of attendees being between 22 and 35, and a slight male bias.

EMF attracts attendees from across the UK, with a small percentage travelling internationally to attend.

EMF is a family-friendly event with activities for children. Approximately 10% of attendees in 2022 were under 18.

### 1.4 Organisation

EMF is operated by EMF Festivals Ltd, a wholly-owned subsidiary of the non-profit Electromagnetic Field Ltd. Surplus generated by EMF events is reinvested in future events or donated to other non-profit causes.

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Electromagnetic Field is an entirely volunteer-run event, with all staff volunteering significant amounts of their time to organise the event, and many attendees volunteering their time during the event.

Overall responsibility for the event lies with the Directors of EMF Festivals Ltd.

## 1.5 Management

We strive to operate EMF to a standard equivalent to professionally-run events. Many of the organising team have significant experience at previous EMF events, as well as several similar events held across Europe.

Those volunteers involved in running the event are formed into teams, with each team having an experienced lead and a deputy lead who are accountable for that team.

Organisational meetings of all team leads (the “organising team”) are held periodically prior to the event. During the event, meetings of the organising team will be held daily to deal with any issues arising.

At all times during the public opening hours of the event, an experienced member of the organising team will be on call as the “duty site manager” with ultimate responsibility for event operations.

## 1.6 Insurance & Liability

EMF will carry public liability insurance of at least £5m with respect to the event. Liability insurance will also be held with respect to volunteers and the public.

## 1.7 Site

The event will be located in parkland at Eastnor Castle Deer Park. EMF has an agreement to use the site between Wednesday 22 May and Friday 7 June.

Where not otherwise secure, the site will be surrounded by a Heras-style fence for security purposes. This perimeter will surround the event structures and all camping areas. All licensable activities will happen within this perimeter.

The entrance gate will be staffed 24 hours per day, and tickets will be exchanged for wristbands on entry.

Talks at EMF will be held in three enclosed structures, with staging and seating. There will be a number of smaller structures, mostly clearspan marquees, for workshops and other functions.

Further detail of the site layout, including the locations of tents, toilets, and water supply, can be found on the site plan in appendix B.

## 2 Code of Conduct

EMF takes a strong line on harassment and other unwanted conduct at our events. EMF is held under a Code of Conduct which forbids racist, sexist, and otherwise prejudiced behaviour. Attendees are made aware of this when purchasing a ticket. The Code of Conduct will be enforced by a dedicated team which will have the power to eject violators from the event.

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## **3 Licensing**

EMF will apply for a premises license from Herefordshire Council. The Designated Premises Supervisor is Russ Garrett.

### **3.1 Alcohol Sales**

The proposed licensed hours for alcohol sales are:

<b>Date</b>	<b>Time</b>
Wednesday 29/05	16:00 – 00:00 (staff training - sales to setup volunteers already on site)
Thursday 30/05	11:00 – 02:00
Friday 31/05	11:00 – 02:00
Saturday 01/06	11:00 – 02:00
Sunday 02/06	11:00 – 01:00

Bars will be operated by EMF and staffed by volunteers.

Alcohol sales for EMF will be overseen by Russ Garrett and Steve Early who hold personal licenses.

Drinking water will be available for free at the main bar and at taps and washbasins across the site (see section 6).

#### **Training**

Volunteer bar staff who do not hold a BIIAB level 1 or higher qualification will be required to complete on-site training on event policies and the legal responsibilities of alcohol sales prior to undertaking any sale of alcohol on the premises.

A record of bar staff training will be kept for a period of 12 months and will be made available to responsible authorities on request.

#### **Age Verification**

Bars will operate a “Challenge 25” policy for dealing with under-18s, and staff will be trained on this policy before undertaking any alcohol sales.

If a customer appears to be younger than 25, verification of age will be required before allowing the sale. Only the following documents will accepted as proof of age:

- Passport
- Full or provisional UK or EU photocard driving license
- Proof of age card bearing the PASS hologram
- National identity card issued by a EU member state, Norway, Iceland, Liechtenstein or Switzerland.
- Biometric Immigration Document

If no such document is produced, or if there is suspicion that the document is not genuine, staff will be instructed to refuse the sale.

A register of refused sales will be kept for a period of 12 months and will be made available to responsible authorities on request.

#### **Bar Signage**

Prominent, clear, and legible signage will be placed at an interval of at most every 5 metres behind each bar, stating:

- That a Challenge 25 scheme is in operation
- That it is an offence for under 18s to purchase alcohol

- 
- The availability of small measures

A full price list will be provided at each bar, which will include the ABV levels of each drink and the measured quantity in which spirits are being sold.

### **3.2 Regulated Entertainment**

The main focus of EMF is talks and workshops, however the event will provide some live music and DJs, as well as ancillary recorded music between talks, and showing of films. Music is a secondary focus of the event, and will not be a major component of any promotion or advertising.

Proposed licensed hours for regulated entertainment will be:

Date	Time
Thursday 30/05	16:00 – 00:30
Friday 31/05	11:00 – 02:00
Saturday 01/06	11:00 – 02:00
Sunday 02/06	11:00 – 00:30

Music will be scheduled to finish 30 minutes before the end of the licensed hours in order to allow for overruns.

Further information on EMF's noise management policy can be found in section 4.

### **3.3 Public Nuisance**

The event site is not in direct proximity to any residential areas.

EMF is a camping festival, and no day tickets will be on sale. The majority of attendees are not expected to leave the site during the event. Previous events have had no recorded incidents of public nuisance.

Because of this, we consider that there is a low risk of attendees causing public nuisance outside the site.

### **3.4 Prevention of Crime and Disorder**

There has been no reported crime at previous EMF events. Due to the unique community nature of the event, crime within the event site is unlikely.

EMF aims to reduce the presence of glass on site, but due to the nature of the event it is not practical to eliminate it. Drinks will not be served in glass glasses. Attendees are requested not to bring glass onto the site where possible.

A log will be kept at the premises, and made available on request to the Council or the Police, which will record:

- crimes reported to the venue
- ejections of attendees
- incidents of disorder
- visits by a relevant authority or emergency service
- changes of Duty Site Manager

Attendees will be advised not to leave valuables in their cars.

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## 4 Noise

We are mindful of the need to keep noise nuisance to a minimum and EMF will cooperate with site management, Environmental Health, and local residents to achieve this.

Programmed music performances will be confined to Stage B and the bar areas, which will be oriented to direct sound away from the closest residential areas.

Due to the limited number of music stages and comparatively small audience size, sound levels can be kept low and easily controllable. EMF will emit significantly less noise than a comparably-sized music festival.

No noise complaints were received relating to previous EMF events at this site in 2018 or 2022, and the emitted noise levels are not expected to be significantly higher this year.

Staff involved with noise monitoring, the duty site manager, and sound operators will be in radio or telephone contact and instructed to effectively and swiftly reduce noise levels if necessary. EMF is also experimenting with using network access to amplifier settings to make adjustments to sound levels remotely.

Local residents and Environmental Health will be provided with 24/7 contact details for the event control in case of an issue with noise.

Due to the nature of the event, it is unavoidable that some attendees will bring sound systems. The organisers will endeavour to ensure that any amplified music played by attendees is inaudible at noise-sensitive boundaries outside of the licensed hours, and sanctions will be imposed if necessary to enforce this.

### 4.1 Noise Control Plan

The EMF team includes a number of people with significant experience in sound engineering and noise control. However, implementing an effective noise monitoring strategy given the geography of the area and the widespread nature of the noise sensitive locations would be impractical given the small team and limited budget.

Given the significantly lower sound emissions EMF is expected to produce compared to other events on the Eastnor site, EMF will employ a prediction-based approach to noise control.

Commercial sound prediction software will be used to produce a sound propagation map for worst-case atmospheric conditions. These predictions will be compared to ensure they fall well below the noise level thresholds in table 1 at noise sensitive boundaries.

During the event, the sound level predictions will be verified with a calibrated sound level meter at locations up to approximately 1km away from the event site to ensure that the predictions are accurate. These verification measurements will be logged.

**Table 1:** Noise Level Thresholds (above ambient)

Time	Level
Before 23:00	15dB (LA <sub>eq</sub> )
23:00 – 02:00	10dB (LA <sub>eq</sub> )

The noise sensitive locations defined in Eastnor's existing premises license are noted in table 2.

**Table 2:** Noise Sensitive Locations

Clenchers Mill Lane, Eastnor
Valentines Cottage, Hollybush
Caves Folly Nursery, Colwall
Hancocks Lane, Little Malvern
Rose Mead, Evendine

Testing of sound equipment will not take place between 21:00 – 09:00 and will last for no more than 2 hours on any one day.

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## **5 Children & Young People**

The event will be family-friendly with a dedicated children's area. Under-12s will receive free tickets and under-18s will receive a discount. All reasonable efforts shall be made to ensure that there are no unaccompanied under-16s on site.

Lost child services during the event will be provided by the external provider Nipperbout, with the assistance of the EMF first aid team where necessary.

## **6 Water & Sanitation**

Mains water is available on site from the Eastnor Castle Deer Park mains water supply. No supplementation of the water supply is expected to be needed for the event.

Taps and washbasins will be provided across the site by EMF. All temporary water installation will be in compliance with BS 8551<sup>4</sup> and water authority regulations.

### **6.1 Toilets**

As there are no toilet facilities on site, at least 40 toilets and two urinal blocks, as well as two disabled toilets, will be provided by an external supplier. This is well in excess of the recommendations made by the Purple Guide.<sup>1</sup>

Sinks for handwashing will be provided adjacent to toilets.

Gas-fired showers will also be provided.

Contractors will be responsible for the cleaning of toilets and showers.

### **6.2 Waste Water**

Toilets at the event will be partly of the composting variety and the waste from these will be removed by the toilet contractor. The remaining toilets will be of the vacuum type.

Waste water will be stored in existing underground septic tanks on site, or in above-ground tanks, and as far as is practical will not be allowed to run onto the ground and into watercourses.

Black and grey water will be removed from the site by tanker, and the on-site waste tanks will be left empty at the end of the event.

## **7 Waste Management**

EMF will have a contract with a waste management provider to provide bins and remove waste generated by the event. This waste will be separated into general waste and recycling.

Any remaining waste after teardown will be removed by skip.

Skips and other locations where waste is stored will be located away from structures and sources of ignition in accordance with the fire risk assessment (see section 16).

Regular waste pickups will be carried out within the site in order to ensure that waste does not accumulate around the site during the event.

## **8 Food & Concessions**

Food on site will be provided by commercial catering concessions. Food hygiene certificates, risk assessments, and insurance details will be checked and kept on file for all food vendors.

A full list of food vendors will be sent to Environmental Health no later than 14 days before the start of the event.

Attendees are permitted to bring their food, and they will be reminded that disposable BBQs and similar cooking devices should not be used in tents, or moved there after use due to the risk of carbon monoxide poisoning.

Disposable BBQs may not be placed on the ground to prevent scorching of the grass and reduce the risk of fires.

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## 9 Stewarding & Security

As is common with similar events, we aim to provide as many staff as possible by asking attendees to volunteer.

All stewarding will be overseen by a stewarding co-ordinator, who will have experience managing stewards at similar events, and will be familiarised with how the event is operated by the stewarding team lead before going on duty.

The stewarding coordinator will have the ability to swiftly escalate issues to the appropriate team leads or the Duty Site Manager when needed.

Staffing levels are detailed in table 3.

**Table 3:** Staffing Levels

Role	Period	Staff
Main Gate	24/7	2 – 4 (may be provided by security)
Information Point	9am-midnight	1 – 4
Roving	24/7	2 – 4
Bar	Licensed Hours	2 – 8
Per Stage Tent	During Talks	2
Control / Site Manager	24/7	1 – 3

Stewards will be provided with a briefing document containing sufficient information on how to perform their tasks, as well as how to promptly alert other staff in case of an incident.

In the unlikely event staffing levels cannot be guaranteed, external stewarding services will be sought.

### 9.1 Security

As EMF is a community event, with most people attending with existing community groups, the risk of crime or disorder within the site is considered to be very low. The risk profile of the event is much closer to a conference than a music festival. Previous EMF events have had no recorded crime or disorder.

The main risks which may require the assistance of external security stem from non-ticketholders outside the site perimeter.

Due to the volunteer nature of the event, volunteers at EMF may carry out activities which would normally require SIA licensing in accordance with the SIA guidance.<sup>18</sup> However, EMF aims to keep any risk to volunteers low by employing SIA-licensed private security where appropriate. A security risk assessment can be found in table 4.

**Table 4:** Security Risk Assessment

Hazard	Risk	Control Measures
Theft from car parks	Moderate	SIA security to patrol car parks
Unauthorised entry / risk to gate stewards	Low	SIA security on gates
Theft/vandalism within site	Very Low	None
Alcohol-related disorder	Very Low	None
Ejection from site	Low	SIA security to assist if required

Accordingly, EMF will arrange for at least 4 licensed SIA security staff to be on duty at the gates to the venue. These staff will be on call to handle any issues arising within the site if required.

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## **10 Communication**

### **10.1 Radio**

All key members of staff, including stewards at gates and parking, will be issued with a radio and a contact list, and will be trained in its use.

A member of staff acting as event control will be contactable by radio or telephone at all times and will have emergency contact details for the organisation team.

A radio repeater will be provided in order to extend radio range across the wider area.

### **10.2 Telephone**

A number of fixed and mobile phones will be available at the event control so contact telephone numbers can be made available to external parties and staff who may be out of radio range. Telephone numbers will be easily re-routed to staff mobile telephones in case of emergency.

As the site is in an area of marginal mobile phone coverage, key members of staff will be provided with mobile phones equipped with all-network SIM cards which are expected to provide adequate coverage.

The event will have an internal telephone network covering all major stages and other locations within the event, which can be used for sensitive communications.

In the event that all other communication methods fail during an emergency, the event management team has access to a landline telephone in the Golden Gates Lodge cottage within the deer park.

### **10.3 Communications to Attendees**

Public information shall be capable of being broadcast at all stages by the stage managers. Loud hailers will be available for use by relevant staff to give information directly to attendees.

As WiFi is available to the entire site at EMF, social media comprises a significant part of attendee communication, and this will also be used in emergencies as long as the internet connection is operational.

Communication to attendees before the event will be via email and social media. Attendees must provide a valid email address when purchasing tickets.

## **11 Temporary Structures**

Temporary structures include tents, marquees, big tops, portable cabins, towers, and similar structures. With the exception of those exempt structures listed in the following section, temporary structures on the EMF site must be designed, erected, and dismantled by competent contractors in accordance with the site design provided by EMF.

EMF staff will not modify structures in any way without approval from the supplier. This includes adding banners or scrim which may alter the wind loading of the structure.

Applicable guidance on temporary structures can be found in section 9 of the Purple Guide,<sup>1</sup> the Institute of Structural Engineers guidance on temporary demountable structures,<sup>15</sup> and the MUTA Best Practice Guide.<sup>16</sup>

### **11.1 Exempt Structures**

The following types of structure may be erected by EMF staff, or by attendee “villages” with the prior approval and signoff of EMF staff:

- Commercially-manufactured tents with a footprint of 36m<sup>2</sup> or less
- Truss structures constructed in accordance with a design approved by the manufacturer or a structural engineer
- Vertical aluminium scaffolding poles with a height of up to 6m, anchored in the ground with putlogs to support festoon lighting or small flags.
- Commercially-manufactured antenna masts.

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- Free-standing wooden structures with a total height of up to 4m, where the structure is not enclosed or subject to significant wind loading, and the height above ground of any publicly-accessible part is less than 1.5m.
  - Wooden façades anchored to clearspan marquees, which do not project higher than the roofline.

Camping tents, small gazebos, and similar structures are not required to be approved or signed off.

## 12 Traffic Management & Parking

Attendees will be encouraged to use public transport or car-share as much as possible. Car parking at EMF will be ticketed, and attendee cars will be parked close outside the perimeter of the site.

A shuttle bus service will be provided between Ledbury railway station and the event site.

Approximately 500-700 vehicles are expected to park on site, and the capacity available for car parking is well in excess of this, with a large area available to be used for contingency parking in case of severe weather.

The vehicle entrance for attendees will be the main deer park entrance, east of Eastnor on the A438 (labelled route B on the plan). This will provide approximately 1km of vehicle queueing capacity on private roads within the deer park. Signs marking the entrances to the site will be placed on Eastnor's land, and signs on public highways will be provided by the AA. Accurate directions to the event site will be provided to all attendees in advance.

The maximum rate of vehicle arrival is expected to be 30-50 vehicles per hour for a short period on Friday morning. Sufficient stewarding capacity will be provided to ensure all vehicles are promptly parked, and no queueing is expected on public roads.

### 12.1 On-Site Vehicle Safety

Vehicle movements within the perimeter fence will be restricted to essential journeys during peak hours (16:00–23:00) and marshalled where vehicle visibility is limited.

A speed limit of 5mph will be operated within the event perimeter, with a 15mph limit on roads within the deer park.

The main vehicle gate (Y) will be separate to the pedestrian entrance gate to reduce interactions between pedestrians and vehicles. This gate enters onto the site via a backstage area which will have a low pedestrian flow.

The camper van area will be located within the site, close to vehicle entrance Y. Camper vans will be encouraged to arrive on the Thursday before the event, and depart later on the Monday. Arrivals outside this time will be marshalled.

Catering concessions will be able to access the site through a separate vehicle gate (X), via route A.

Only competent members of staff will be allowed to use site plant. Their training and certification will be checked before the event.

### 12.2 Setup and Teardown

During setup and teardown, the access roads will operate as a one-way system, with arrivals via route A (Ridgeway) and departures via route B (main deer park entrance).

This one-way system will avoid slowdowns and vehicles having to unnecessarily reverse on the event site.

Contractors will be provided with delivery directions in advance of the event, including directions on the correct approach route through Ledbury town centre from the M50 J2.

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## **13 Electrical Installations & Lighting**

There is no existing mains electrical supply on site. All electricity will be supplied from a temporary electrical system provided by EMF.

The electrical system will be installed, tested, and operated in accordance with the BS7909 code of practice for temporary events<sup>3</sup> and the latest BS7671 wiring regulations.<sup>2</sup> The system will be installed and tested by EMF staff, with assistance from external contractors where required.

All final circuits rated less than 32A will be protected by 30mA, 10ms Residual Current Circuit Breakers (RCCBs/RCDs). All other circuits, except those run through secure staff-only areas, shall be protected by RCCBs with ratings chosen to maximise protection which keeping nuisance trips to a minimum.

At EMF, power is made available to attendees, primarily via 16A “Ceeform” sockets or 13A sockets housed in a waterproof enclosure. This approach has been used safely without incident at previous EMF events and many similar events in Europe.

Any attendee-provided equipment to be connected to circuits rated higher than 16A will be subject to a thorough visual inspection by a competent person before connection.

### **13.1 Lighting**

General site lighting will be provided by festoon lights along paths, with floodlights provided where necessary.

Lighting on primary thoroughfares will be fed from two independent power supplies to maintain adequate lighting during the failure of one generator.

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## **14 Special Effects**

EMF welcomes attendees to bring their own installations and demonstrations. Some of these installations may employ special effects with their own risks, and EMF aims to, where reasonably possible, put straightforward processes in place so these can be used safely.

These special effects policies apply to all effects on site, whether provided by EMF or attendees.

### **14.1 Strobe Lighting**

EMF has previously welcomed a number of attendees with photosensitive epilepsy. Due to the risk to those people, no discharge-style strobe lights will be allowed on site, on stages, installations, or otherwise.

Those responsible for lighting systems which have the capability to flash brightly at frequencies capable of triggering photosensitive epilepsy (3-50Hz) will be informed that such effects are not permitted to be used on site.

### **14.2 Lasers**

Unless otherwise authorised by EMF, all laser effects on site will be limited to Class 1 lasers with no audience scanning or possibility of direct eye exposure.

Laser effects which do not meet the above limits must either be provided and operated by a reputable contractor, or authorised by a person competent to evaluate their safety. A permit will then be granted by EMF.

Laser safety will be evaluated with reference to HSE<sup>8</sup> and PLASA<sup>9</sup> guidance.

Unauthorised lasers, including laser pointers, must not be used on site.

A NOTAM (Notice to Airmen) covering above-horizon laser scanning will be filed in advance with the Civil Aviation Authority.

### **14.3 Flame Effects**

The majority of flame effects which will be used at EMF are Liquefied Petroleum Gas (propane) effects.

A full set of rules for flame effects at EMF will be provided to attendees who intend to bring them. These rules are based on the comprehensive Flame Effects Guidelines published by the Burning Man event in the USA,<sup>7</sup> with reference to the HSE publication SIM 05/2004/09.<sup>6</sup>

These rules include requirements for:

- Construction standards to prevent gas leaks
- Safe location of effects away from people and flammable objects
- Provision of fire extinguishers
- Operating guidelines and supervision

A full design of the flame effect must be submitted to EMF prior to the event. EMF will verify the design and construction of flame effects meets these rules, and will allocate a safe location.

Once the effect has arrived on site and been checked against the submitted design, EMF will issue a permit for use. Use of flame effects without a permit at EMF will be prohibited.

### **14.4 Other Pyrotechnics**

Explosive pyrotechnic special effects or "cold spark" generators may be used by appropriately-trained staff on stages, operating under an appropriate risk assessment. They will not be used by attendees.

### **14.5 Smoke**

Theatrical smoke effects can cause problems when used indoors if escape routes are obscured in case of an evacuation.

EMF will only use smoke effects inside temporary structures when they are cleared of chairs and other furniture, and operators will be made aware of the importance of ensuring escape routes are visible.

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## 15 Contingencies

Contingencies which may require action by the organisation include (in approximate decreasing order of likelihood):

- Severe weather
- Fire
- Major accident/illness
- Collapse of structures
- Bomb/terrorist threat

In the event that an emergency situation develops, all staff will be made aware of the appropriate procedures to ensure that it is promptly escalated to the Duty Site Manager. They will assume overall control of the incident at the event control, assisted by other members of the organising team as necessary.

If an announcement has to be made to attendees, the incident team is able to ensure announcements are made via stage PA systems, loudhailers, and online channels. There is no site-wide PA system at EMF. Further information on emergency communications to attendees can be found in section 10.3.

It is the Duty Site Manager's responsibility to ensure that the emergency services are called if necessary.

### 15.1 Major Incidents

A major incident is any emergency which puts a significant number of people at risk of harm and/or requires the large-scale assistance of the emergency services.

The decision to declare a major incident will be made by the incident team in consultation with the emergency services.

Once a major incident is declared, control over staff on site will be transferred to the emergency services until the major incident has ended.

### 15.2 Emergency Access Routes

The site has two independent access routes, as indicated on the site plan. No attendee vehicles will be entering the site via route A, so this route will be preferred clear route for approaching emergency vehicles, unless indicated otherwise.

### 15.3 Evacuation

Due to the size of the site, the comparatively low camping density of EMF events compared to other festivals, and generous provision of fire lanes, a full evacuation of the site is unlikely to be required. However, partial evacuations may be required, especially in case of fire.

If necessary, announcements will be made to evacuate attendees to another part of the site, and the incident area cordoned off.

#### Temporary Structure Exits

The exit width for significant temporary structures (with an enclosed area of larger than  $200m^2$ ) calculated in accordance with section 4.1 of the Fire Safety Guidelines for Open Air Events,<sup>11</sup> and section 10 of the Purple Guide,<sup>1</sup> can be found in table 5.

Due to the capacity and size of structures at the event, it is expected that all structures will operate significantly below their theoretical maximum capacity, however the theoretical maximum will be used for calculation of exit widths.

Stage B will be used in both a seated and standing configuration, and calculations are made for both these configurations, with the larger of the exit widths being used.

In structures containing seating, exit calculations are made with a maximum exit time of 2 minutes and a flow rate of 66 persons/metre/minute. In standing-only structures, exit calculations are made with a maximum exit time of 3 minutes and a flow rate of 82 persons/metre/minute.

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**Table 5:** Structure Exit Calculations (enclosed area  $> 200m^2$ )

Structure	Type	Capacity	Size ( $m^2$ )	Total width exit	Min exits	Max exit distance (m)
Stage A	Big Top	1000	1350	7.6m	3	24
Stage B (seated)	Big Top	600	800	4.1m	2	24
Stage B (standing)	Big Top	1000	800	4.6m	2	24
Stage C	Saddlespan	450	500	3.0m	2	24
Bar	Big Top	600	400	4.54m	2	24
Lounge	Marquee	100	293	1.8m	2	24

Structures enclosing areas between  $100m^2$  and  $200m^2$  will have a minimum of two exits. Except for those structures in table 5, travel distances to the nearest exit will be kept below 18m.

Structures enclosing areas below  $100m^2$  will have a minimum of one exit with a width of 1.05m.

### Site Exit Calculations

It is considered unlikely that a full site evacuation will be required, as fire lanes will be in place to prevent the spread of fire, and there is ample space for evacuation to a safe area within the site. Nonetheless, the total exit time for the EMF site is calculated here in accordance with section 4.1 of the fire safety guidelines:<sup>11</sup>

- Risk level: low
- Escape time: 10 minutes
- Exit flow rate: 109 persons/metre/minute
- Total site occupancy: 3250 persons

The total exit width required is therefore **2.98m**. This is below the size of the main pedestrian exit, so one additional emergency exit will be provided in case this exit is unavailable.

### Exit Signage

Illuminated emergency exit signs will be provided at the exit of every temporary structure which has an enclosed area of more than  $100m^2$ , and in smaller structures if the exits are not readily apparent. All emergency exit signage will comply with the *Health and Safety (Safety Signs and Signals) Regulations 1996*.

## 15.4 Severe Weather

Severe weather, including heavy rain, high winds, and lightning, may require the event programme to be altered or even cancelled.

Prior to and during build-up, weather forecasts will be periodically monitored to ensure that ground conditions are acceptable. During the event, forecasts will be reviewed daily for risks of severe weather.

The primary source of weather information will be [windy.com](#), which incorporates forecasts from a number of weather models including the Met Office, as well as weather radar. [lightningmaps.org](#) will be used to monitor lightning strikes in realtime.

In the event of severe weather being forecast during the event, the organising team will be informed and weather will be monitored on a regular basis. Attendees will be warned using the methods in section 10.3 if necessary.

In the event of severe weather posing a risk to temporary structures due to wind or lightning, an emergency situation will be declared in accordance with section 15. The entire event programme will be halted and attendees evacuated from those structures by stage managers with assistance from other stewards if necessary.

Depending on the nature of the severe weather, it may be appropriate to evacuate attendees to their vehicles until the weather passes, although provision must be made for attendees who arrived by public transport.

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If severe weather produces conditions which will not allow the event to safely continue, the emergency team will begin the event cancellation process detailed in section 15.5.

During severe weather, especially at night, power must not be switched off. If necessary, circuits at risk of potential water exposure or lightning risk should be isolated in order to preserve power for site lighting, communications, and other essential services. During severe weather, accidental injury due to lack of adequate site lighting poses a much more significant risk than electric shock.

### **Heat**

In the event of high temperatures, attendees will be reminded of the availability of drinking water and to avoid direct sun. Free sunscreen will be available at the first aid tent.

The event has a large number of structures and trees which can provide ample shade during hot weather.

### **High Winds**

Maximum wind ratings for temporary structures will be requested from suppliers and easily accessible at event control to ensure that the management team is aware of weather limitations.

### **Lightning**

This section has been prepared with reference to the PLASA guidance for lightning at outdoor events.<sup>10</sup>

Eastnor Castle Deer Park is located in a zone of relatively low lightning risk (0.2-0.5 flashes/km<sup>2</sup>/year<sup>5</sup>), and the event site is surrounded by higher ground on two sides, which will further reduce the risk of a strike on the event site.

The risk from lightning on an event site is not primarily due to direct strikes to persons. More significant risks include:

- “Step potential” caused by current flowing through the ground around structures and trees.
- “Contact voltage” through a person in contact with the metal frame of a structure.
- “Side flash” caused by arcs between metallic objects.

Structures will be designated as “lightning safe” or “lightning unsafe” based on the PLASA guidance. Larger structures will be considered lightning safe if all persons can be kept more than 3m from any metal parts of the structure.

The following procedure will be implemented in case of lightning:

Lightning forecast	Staff informed, weather monitoring increased
Lightning within 10 km	Staff prepared to take action, masts lowered, attendees informed
Lightning within 6 km	Event programme stopped. Attendees directed to lightning safe structures or vehicles.
Last strike within 10 km	Event programme may resume.

In the event of a lightning storm overnight when there is no programme in operation, it is considered that attendees will be safe sleeping in their tents.

### **Flooding**

The site is situated on a slope, so in the event that flooding does occur, it is likely to only affect lower-lying parts of the site. In case of flooding, temporary structures on higher ground should be repurposed to accommodate attendees who are unable to access their tents. This is likely to be a short-term measure while the event is cancelled and the site is evacuated.

## **15.5 Cancellation**

In some circumstances the event may have to be cancelled either before or after it has started. In this case attendees must be informed as promptly as possible.

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## **Before the Event**

If cancellation is required before the event starts, attendees will be informed by direct email and social media.

If cancellation happens shortly before the scheduled start of the event, staff will be made available at the gate to inform any arrivals of the cancellation and ensure they promptly depart.

## **During the Event**

If cancellation is required during or very shortly before the event, those attendees on site will be informed using the methods in section 10.3. Attendees not yet on site will also be informed.

Once the cancellation process has started, all programmed activities on site will cease.

In some cases it may be appropriate to keep attendees on site overnight until they can depart safely.

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## 16 Fire Safety

This section comprises the fire risk assessment for EMF, and has been prepared with reference to government guidance for fire safety at open-air events<sup>11</sup> and guidance on storage of LPG cylinders.<sup>12</sup>

### 16.1 Sources of ignition

The main potential sources of ignition at EMF are:

- Hot exhaust from generators
- Cooking appliances in backstage catering and concessions
- Camp fires, BBQs, and gas appliances used by attendees
- Flame effects
- Faulty electrical equipment
- Vehicle exhaust

### 16.2 Sources of fuel

- Tents and marquees, including those brought by attendees
- LPG cylinders, both in use and in storage
- Vehicles
- Waste, including pallets
- Dry vegetation

There is expected to be no significant source of oxidising materials at EMF.

### 16.3 Steps to minimise risk

The following steps will be taken to mitigate risks of fire:

- Generators provided by EMF, along with fuel storage, will be sited away from all combustible materials in accordance with supplier's guidance.
- All electrical power distribution equipment to meet requirements in section 13.
- No other generators will be allowed on site.
- Combustible materials will be stored away from structures.
- LPG cylinders not in use, whether full or empty, will be stored in a fenced enclosure in open air at least 5m away from any structures.
- Skips and other accumulations of waste will be kept at least 6m from any structures, flammable items, and sources of ignition.
- Waste points will be monitored to ensure they are not overflowing.
- Temporary structures will be sourced from reputable suppliers and have appropriate fire safety certification.
- Firefighting equipment will be provided on site in accordance with section 16.5.
- Camp fires or BBQs will not be allowed on the ground.
- Attendees will be instructed not to use gas appliances in tents.
- Roving staff will be instructed to monitor the site for any fire hazards and contact control over radio.
- Catering/concessions staff will be made aware of regulations regarding gas storage.
- Catering area will be sited well away from camping area. Concessions staff will be instructed not to sleep in stalls, with camping at least 8 m away.
- Sufficient access to the site will be provided and maintained clear for access of fire appliances.
- Vehicle parking will be separate from the event.
- Weather conditions will be monitored in case of very dry conditions raising the risk of spread of fire through vegetation.
- Incandescent lighting will not be used in most structures, and in the event that it is used, special consideration will be made for the fire risk.
- Flame effects will not be allowed without a permit. See section 14.3 for more details.

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All stewards will be briefed on steps to take if a fire is discovered which will include alerting other staff by radio and, if necessary, evacuating attendees. Megaphones will be available to alert attendees.

Exit calculations for evacuation of temporary structures and the event site in case of fire can be found in section 15.3.

Information on emergency services access routes can be found in section 15.2.

## 16.4 Campsite Fire Safety

Clearly marked fire lanes will be provisioned within camping areas. Live-in vehicle areas will have a marked fire lane between every two rows of vehicles, and camping areas will be no further than 50 m from a fire lane.

Fire lanes will be patrolled while attendees are arriving and daily thereafter to ensure they are kept clear.

## 16.5 Fire Extinguishers

Fire extinguishers will be provided on site in accordance with section 3 of the guidance,<sup>11</sup> and will be distributed as detailed in table 6.

**Table 6:** Fire Extinguisher Provision

Location	Type	Number	Placement
Structures > 400m <sup>2</sup>	A	2 + 1 per 400m <sup>2</sup> floor area	Near exits
Structures ≤ 400m <sup>2</sup>	A	2	Near exits
Low-risk structures < 90m <sup>2</sup>	A	1	Near exits
Generator	B + electrical	1	2m from generator
Kitchens	A + B	1/1	Adjacent
Campsite fire points	A	2	No further than 50m
LPG storage	A + C	1	Adjacent
Bulk waste storage	A	1	Adjacent

Catering concessions will be required to provide their own firefighting equipment.

Some small marquees ("Village Tents") will be sited by EMF within the camping areas for the use of attendees in villages. If these tents are below 25m<sup>2</sup> in enclosed area, they may be sited within 10m of a campsite fire point instead of having their own fire extinguisher.

## 16.6 Fire Appliance Access

In accordance with section 3.3 of the guidance,<sup>11</sup> all vehicle paths on site will meet the following requirements to allow access by fire appliances:

- Road width of not less than 3.7m
- Clear width at gates not less than 3.1m
- Surface loading in excess of 12.5 tonnes
- Suitable turning area provided

No point on the site will be further than 50m from such a path.

## 16.7 Responsibility

The competent persons with responsibility for fire safety on the EMF site will be the same as those with responsibility for general safety (see section 18).

## 17 Health & Welfare

Information about health and welfare will be communicated to attendees through the website and attendee booklet. Important information can also be included in emails to attendees before the event.

Further information on attendee communication can be found in section 10.3.

### 17.1 Medical

Medical support during the event will be provided and coordinated by an external medical provider, Outdoor Medical Solutions, who have experience providing medical support at previous EMF events. EMF volunteers may provide part of the medical staffing. All first aiders will be qualified to a minimum of FREC3 (or equivalent PHEM level D certification).

Medical provision is assessed based on the number of attendees and previous history of incidents at the event, with reference made to the recommendations in Chapter 5 of the Purple Guide.<sup>1</sup>

We take into account that the Purple Guide recommendations are intended to be indicative, not prescriptive, and that Electromagnetic Field is an event with a significantly different character from other similarly-sized festivals, which has consistently shown a low demand on medical resources at previous events (see table 7). Specifically:

- EMF is a much lower-energy event than a similarly-sized music festival, with the majority of content being seated talks and workshops. Where present, crowds are much lower-density than comparable events
- alcohol and drug misuse is low
- there are no “headline acts” which would result in a surge of medical incidents at peak times
- there is a compact, combined arena and campsite, with attendees always remaining within a short walking distance of their tents
- ample seating and shade structures are provided

**Table 7:** Previous event medical statistics

Year	Capacity	Incidents	Attended hospital	
			by own transport	by ambulance
2022	3000	Data unavailable	Data unavailable	0
2018	2350	111	0	0
2016	1900	56	2	1
2014	1100	65	2	0
2012	499	Not recorded	0	1

Although data from the event in 2022 was lost, qualitative reports from medical staff indicate a very low rate of serious incidents, with most incidents being minor or welfare-related.

Due to the distance of the event site from the nearest hospital, a crewed ambulance will be present at all times when the number of people on site is expected to be above 1000. EMF also has a number of attendees who are GPs and other healthcare professionals, and who have volunteered to be on-call.

Taking into account the above factors, we aim to provide staffing at the lower end of the ratios recommended in the Purple Guide.

Consequently, we will provide the staffing levels shown in table 8. Clinical governance will be provided by staff designated by the external medical provider.

Medical staff on site will have access to a dedicated small vehicle for transport within the site.

### 17.2 Welfare

EMF will aim to provide a welfare service for attendees in order to further reduce load on the medical facilities. Details on this are yet to be finalised.

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**Table 8:** Minimum medical staffing levels at site capacity of 3,250

Role	Peak	Off-peak
Paramedic	1	0
Paramedic (ambulance crew)	2	2
First responder	4	2

### 17.3 Infectious Diseases

The following general measures will be taken to minimise the risk of infectious diseases:

- Handwashing facilities with soap will be made available at several points on the site.
- Toilets and showers will be cleaned by contractors.
- Particular attention will be paid to ventilation of temporary structures, with exits placed on opposing sides where possible and ventilation fans available.

If an outbreak of infectious disease is suspected, it will be reported to the local UKHSA Health Protection Team.

As an outdoor event, EMF is at a comparatively lower risk for spread of airborne disease, but particular attention will be paid to ventilation within temporary structures.

There is not expected to be a significant amount of queuing at the event, and where this is the case, such as at the entrance and toilets, this will be outdoors.

Sufficient handwashing facilities are planned to be available that hand sanitiser is not considered necessary, although attendees will be advised to bring their own.

#### Respiratory Diseases

In order to discourage people from attending if they are at risk of transmitting respiratory diseases, including COVID-19, EMF will refund tickets for attendees who report a positive test for COVID-19 or flu-like symptoms in the days before the event.

EMF will encourage attendees, staff, and vendors to take a rapid test before departing for the event, and also to bring rapid tests to carry out during the event.

Staff involved in setup will be advised to reduce contact with other people for the week prior to their arrival on site to reduce the risk of an outbreak starting during setup.

EMF will also have rapid tests available at the first aid tent, and attendees with symptoms will be asked to take a test.

If attendees test positive for COVID-19 during the event, they will be advised to isolate in their own tent and leave the event as soon as is practical.

Depending on the prevalence of the virus, EMF may restrict capacity within tents, and require masks in indoor areas.

### 17.4 Tick Bites

As the event is held in a deer park, there is some increased risk of tick bites. However, deer are not kept in the event area during the summer months, and the grass within the perimeter will be mown which significantly reduces the risk. There were no tick bites recorded at our previous events at this site in 2018 and 2022.

Attendees and setup/teardown staff will be reminded of the risk of tick bites, and the first aid team will be equipped to deal with them.

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## **18 Safety**

Overall responsibility for safety on site will rest with Will Hargrave and Russ Garrett, both of whom have experience at many similar events and are familiar with the applicable safety and licensing law.

### **18.1 Safety Coordinator**

A safety coordinator will be on duty, who will have responsibility for the safe conduct of all operations on site. The safety coordinator will have the authority to stop unsafe activities and warn or expel any person from site if necessary.

Where possible, during setup and teardown the safety coordinator will not have any additional responsibilities which would result in a conflict of interest due to time pressures.

Notwithstanding this, all team leads will be aware of how to conduct their operations safely.

### **18.2 CDM Regulations**

For the purposes of the *Construction (Design and Management) Regulations 2015*, EMF Events Ltd is considered to be the Client, Principal Designer, and Principal Contractor for the event.

Accordingly, EMF is responsible for the design of the event site, as well as coordinating health, safety, and welfare amongst all contractors on site, as well as its own volunteers.

More information on CDM and the entertainment industry can be found in the HSE guidance.<sup>14</sup>

### **18.3 Event Risk Assessment**

The overall risk assessment for the event can be found in table 9. Where control measures are covered by sections elsewhere in this document, they will be referenced in the risk assessment.

**Table 9:** Event Risk Assessment

Hazard	Risk	Affected Parties	Control Measures	Resulting Risk	Responsible Team	Comments
Electric Shock	Moderate	Everyone	All electrical installations to conform to BS7671. 30mA RCDs on all final circuits. Regular visual checks. Attendees who require power will be made aware of the risks. (Section 13.)	Low	Power	
Fire	Moderate	Everyone	Please refer to section 16 for the fire risk assessment.	Low	All	
Injury from vehicles operating on site	Moderate	Everyone	Vehicle movements on site to be restricted (section 12.1). Site plant to only be used by appropriately experienced persons.	Low	Stewards	
Trips & Falls	Moderate	Everyone	As far as is practical, ensure all cables are buried or flown above head height. Ensure site is adequately lit.	Moderate	Setup	Trip hazards (guy ropes, etc.) will always be present on a camp site.
Infectious Disease (including food poisoning and COVID-19)	Moderate	Everyone	All food concessions to have food hygiene certificates checked and on file (section 8). Water supply to be installed in accordance with regulations (section 6). Adequate handwashing facilities to be made available, especially in bar and food prep areas. See also section 17.	Moderate	Vendors, First Aid, Site	
Glass injuries	Moderate	Everyone	Discourage bringing glass onto site. Drinks will be served in plastic or paper cups.	Low	Stewards	
Crowd Safety/Crushing	Very Low	Everyone	Stewards to monitor situation and report by radio.	Very Low	Stewards	Event has historically been low-energy.
Injury from collapse of temporary structures	Low	Everyone	All temporary structures are provided and erected by reputable external contractors. Wind speed to be monitored and structures closed if design limits are exceeded (section 15).	Low	Setup	
Dehydration, sunburn, and heatstroke	Low	Everyone	Drinking water freely available. First aiders on site. If weather is very warm, remind attendees to drink water. Ample shade available in temporary structures and under trees. Free sun-screen available in first aid tent.	Low	First Aid	
Flooding & severe weather	Low	Everyone	Severe weather plan in section 15.4.	Low	Site	
Insect bites & stings	Low	Everyone	First aiders on site.	Low	First Aid	
Drowning in lakes	Medium	Everyone	Clear area left between any structures/camping areas and lakes. Lifebuoys available on site. Adequate lighting around lakes. Family camping located away from lakes. "No swimming" signs.	Low	Setup	Lakes are shallow, especially around edges, and not attractive for swimming.

## 18.4 Buildup and Teardown

### Responsibility

The table below shows the division of responsibility between EMF and external contractors for major setup and teardown tasks:

Activity	Responsible
Laying of fencing and some temporary trackway	EMF
Temporary electrical installation	EMF
Rigging and setup of staging/AV/lighting/sound equipment	EMF & External Contractors
Rigging of decorative and emergency site lighting	EMF
General transportation of items around site, manual handling	EMF
Laying of temporary trackway	External Contractors
Buildup of temporary structures	External Contractors

### Risk Assessment

Hazard	Risk	Control Measures	Resulting Risk	Comments
Injury from vehicles	Medium	EMF staff on site will be required to wear high-vis jackets while walking around site. 15mph site speed limit. Restrict vehicle movements between sunset and sunrise. Brief staff on site in how to treat construction vehicles.	Low	
Falls from Height	Moderate	Any work at heights more than 3m should only be carried out in accordance with an additional risk assessment. MEWPs to be used instead of ladders where appropriate. Access equipment must only be used by those who are competent to use it.	Low	
Injury from collapsing structures	Medium	Temporary structures to be constructed by contractors only. EMF staff to be kept clear until structures are signed off. Weather conditions to be monitored.	Low	
Electric shock	Low	Reputable suppliers used for electrical equipment. Visual inspection before deployment of equipment. Distribution equipment to only be powered on by competent person after inspection and testing in accordance with BS7909.	Low	
Foot/leg injury	Medium	Staff informed about appropriate footwear in advance. Staff reminded of the dangers of stepping off moving vehicles, even at low speed.	Low	
Hand injury	Medium	Gloves to be provided by EMF to reduce hand injuries during manual handling.	Low	

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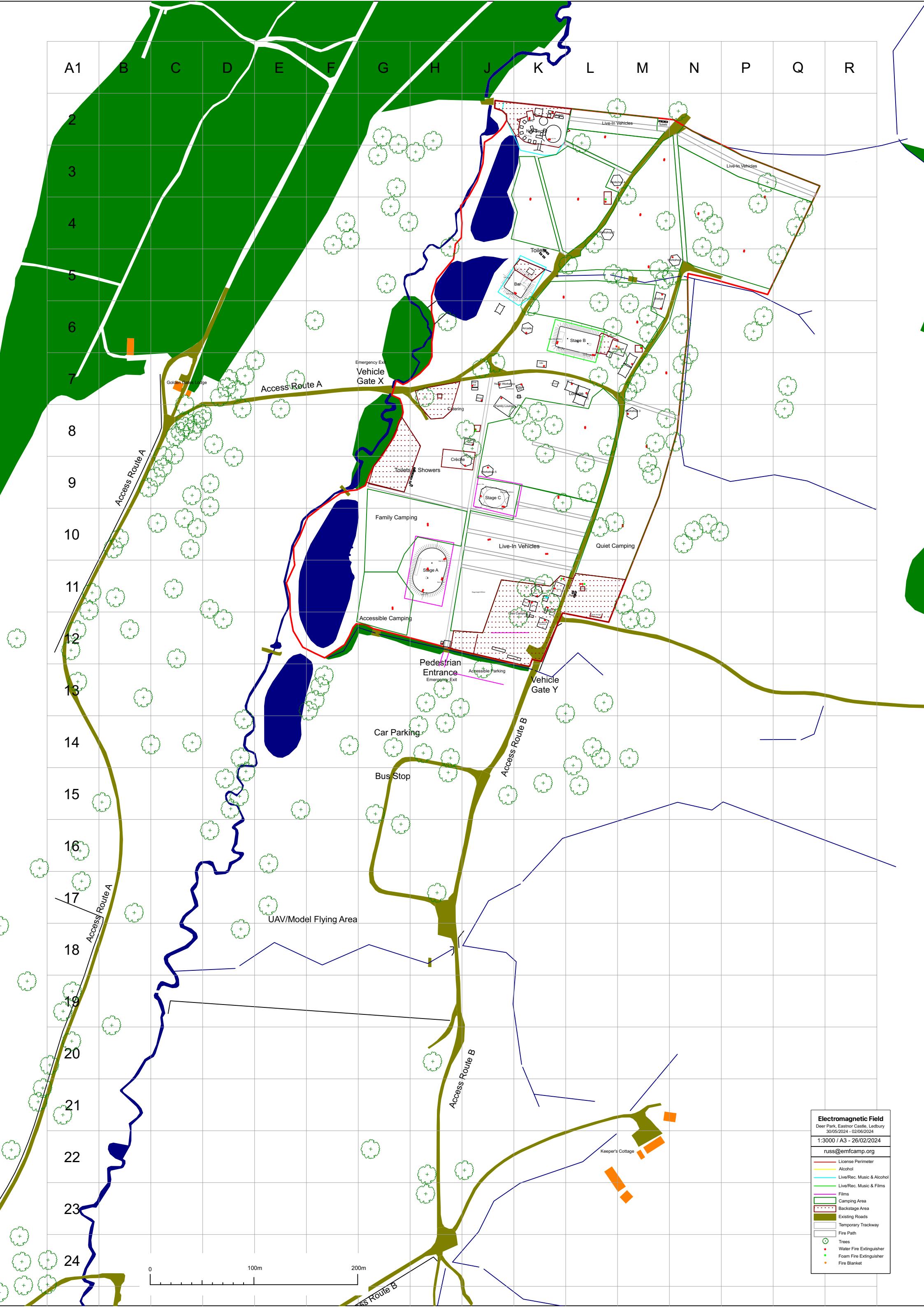
## **A Lost Child Policy**

[To be confirmed]

## B Site Location & Plan

### B.1 General Location





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