

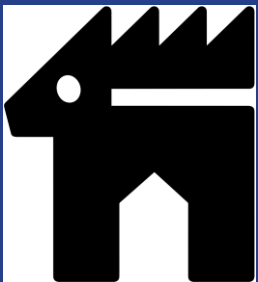


Welcome to High Tide Group

Festival Wi-Fi

Since COVID people have moved heavily to contactless payment
For contactless to work, a connection to the internet is required.

Village 4G masts are design for about 1000 people, not 10,000



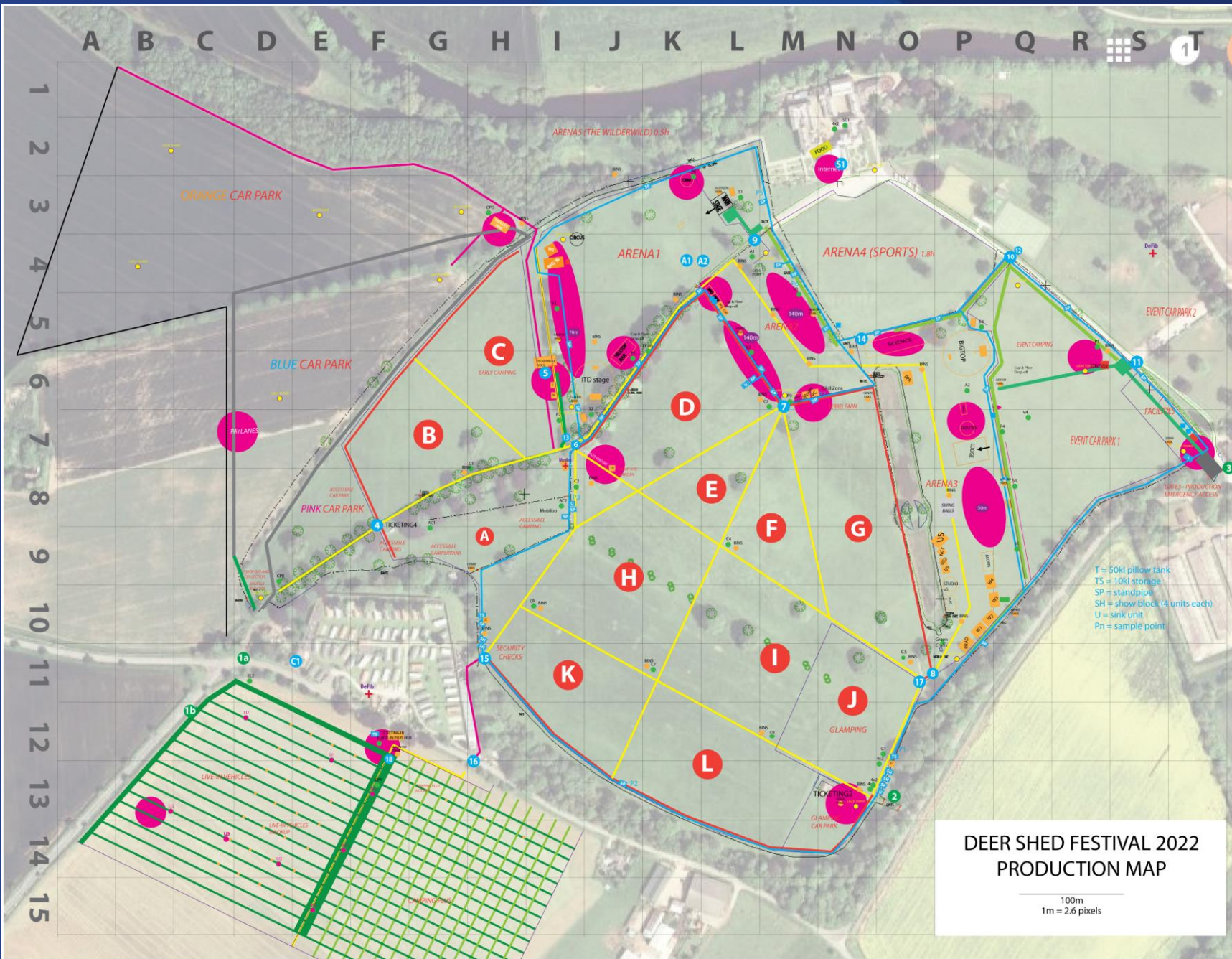
The Background

- DeerShed is a local family friendly Music festival that attracts close to 10,000 people each year.
- We have been asked to provide WIFI over the whole site for the following services.
 - Tickets
 - Bars
 - Vendors
 - Phone in the Welfare tent for contacting parents of lost children

“WIFI MUST WORK – We have gone Cashless”

The Background

- Backbone – Planned
- Backbone – Actual
- Client Access
- Network Overview
- The Timeline



DEER SHED FESTIVAL 2022 PRODUCTION MAP

100m
1m = 2.6 pixels

Head Office



Get Temporary Connected to the outside world



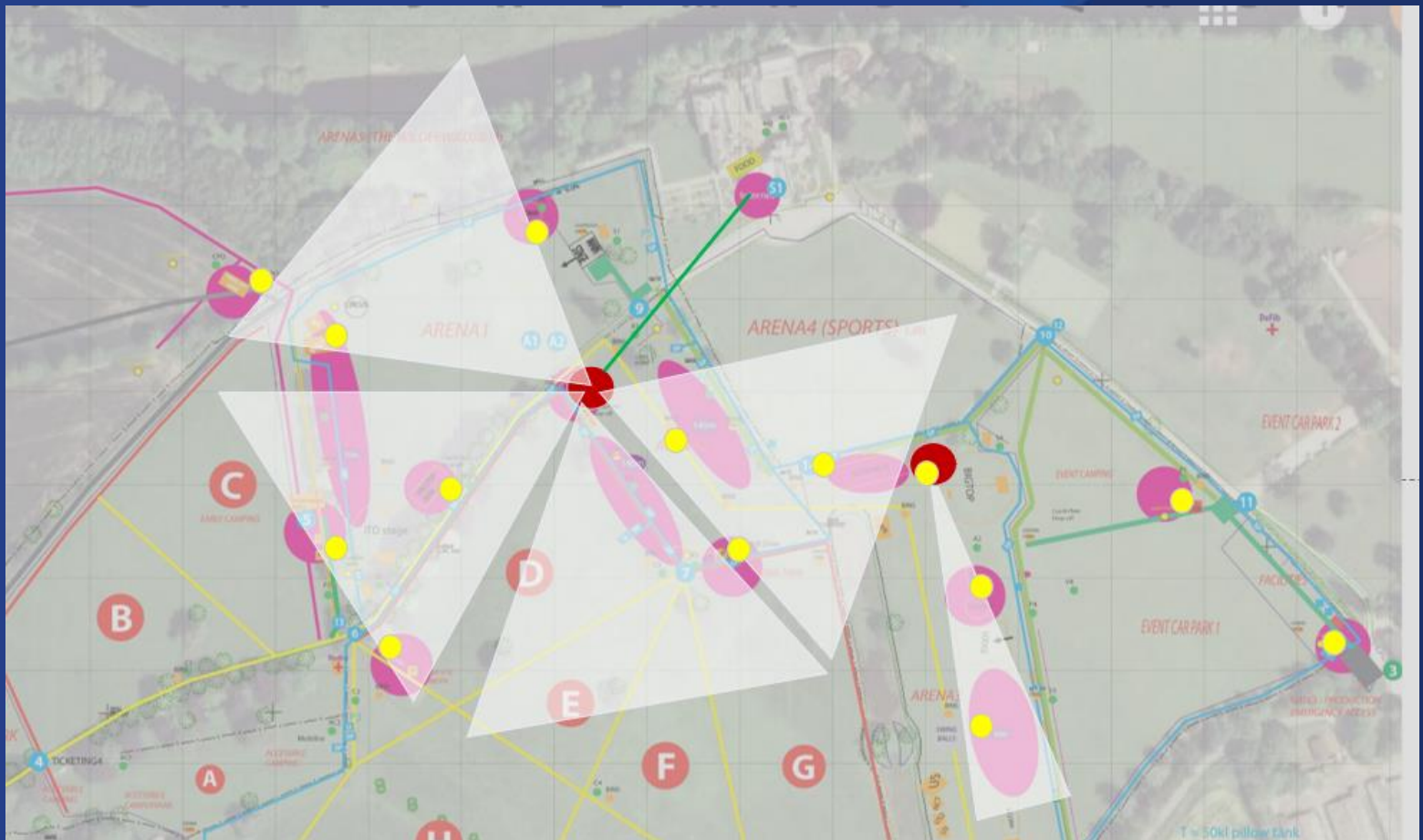
WiFi Setup (Backbone) – Planned

Backbone

4 X Ubiquity sectional antenna

22 X Ubiquity Point to MultiPoint links (back to the sectional antenna with one exception)

Link back to School for internet access



Wi-Fi Setup (Backbone) – Actual



The festival had increased the sizes of the vendor areas, but forgot to tell us.

Client Authentication

- Last year we downloaded over 2TB of data from Netflix. (I am not aware of Netflix being a Epos vendor)
- This year each vendor was issued with a username and password. This enabled us to limit the number of devices a vendor connects
- This also allows us to track bandwidth hogs

Inflight changes

- One of the Vendors (A class vendor I was informed by management) was rated based on the number of app installs at the festival. The lack of 4G was causing them major issues.
- Utilizing a meshed access point and a hotspot portal we were able to provide them with codes to allow people to connect for a short period of time to download the

Inflight changes

- One of the acts utilized an interactive app people needed to download before walking through a forest. They did not plan for a highly congested 4G and asked if they could give out there WIFI code.
- Another Hotspot with 15 min tokens was used.

Planned Timeline

Monday – Setup

Tuesday – Setup

Wednesday – Setup

Thursday – Turn up and test

Friday 8AM – Doors open

Friday 12:00 Bands start

Saturday 7:00 till 24:00

Sunday 7:00 till 14:00

Monday – Strip down



Actual Timeline

Monday – Setup

Tuesday – Setup

Wednesday – Setup

Thursday – NO POWER

Friday 8AM – Doors open. 8:15 Power on, **but not stable. Issues with radio so only ticketing on. We also had a Diesel leak in the WIFI Cabin**

Friday 12:00 Bands start – **Demands for Bars and Vendors, but still power issues and radio issues.**

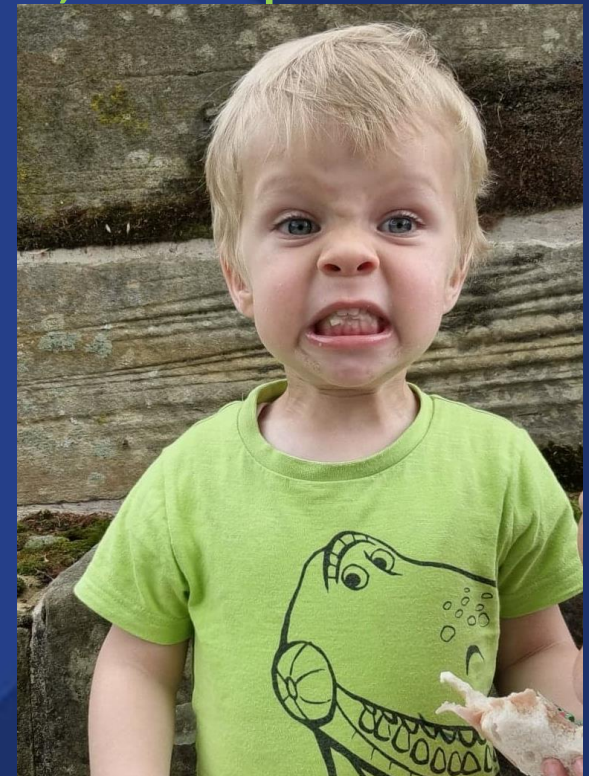
WIFI Team and Electrical Team are NOT friends

Saturday 7:00 till 24:00

Sunday 7:00 till 14:00

Monday – Strip down

STRESS



The Fun Begins

Random Generators around site keep tripping but Electrical team don't know which ones

WIFI Team call the Electrical team to complain, we are able to tell them which generator is off as we have lost part of the network

WIFI team and Electrical Team are now friends.

BAR WIFI Stable, FREE DRINKS 😊



What we take from this

- Keep the network simple
- Take spare kit for unplanned changes
- Mesh can be your friend to provide quick and simple expansions to sections of the network
- Segment traffic if possible, to allow prioritization if needed
- Always have a backup link
- Some Card readers may not have been on WIFI for a long time and decide to do firmware updates
- Allot of card readers are still 2.4 ☹️

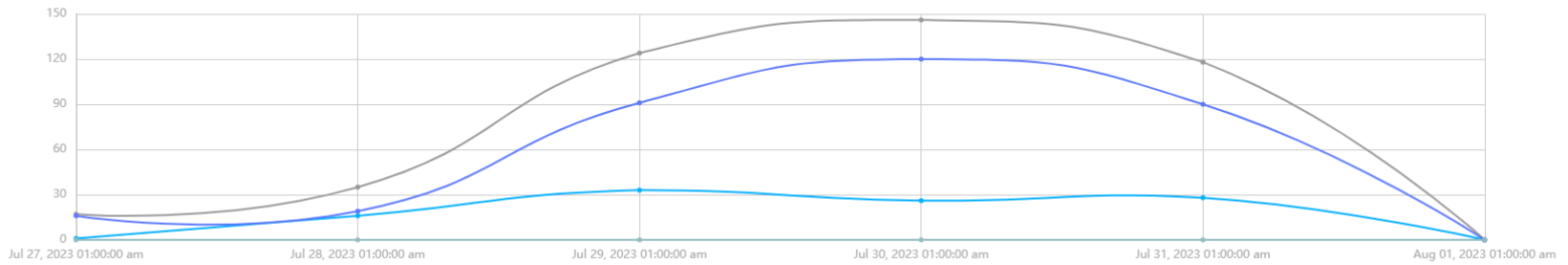
Some of the Family Fun



Wireless Client Activities

● Total Clients ● 2.4 GHz Clients ● 5 GHz Clients ● 6 GHz Clients

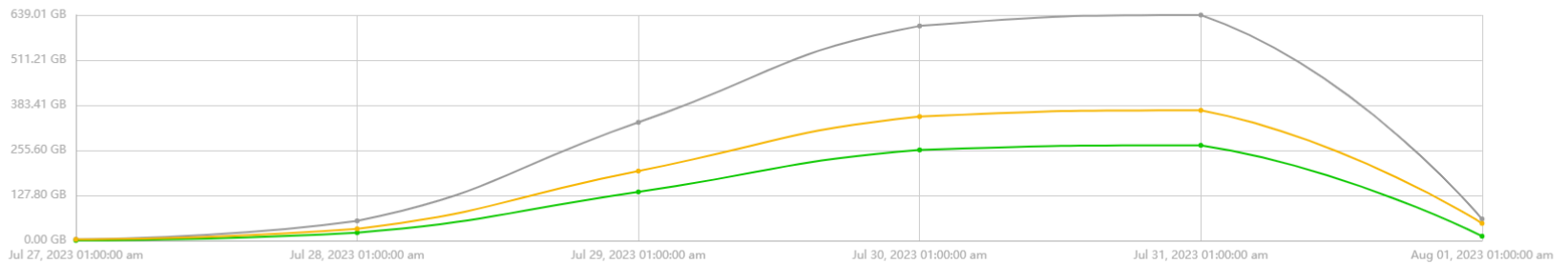
Daily



Wireless Traffic Activities (Transmission)

● Total ● Wireless Rx ● Wireless Tx

Daily



Total Wireless Clients (i)



1328

Wireless Users: 333 (24.93%)

Wireless Guest: 1003 (75.07%)