

# Wireless Network Design Proposal

## Stone Hall

**Prepared for**

Stone Hall

**Prepared by**

EnGenius

**Location****Report Date**

June 3, 2024

**Report Description**

The following report is a network layout plan generated using the EnGenius ezWiFi Planner. This tool analyzes your floor plan's dimensions and features to determine an optimized placement of access points for signal strength and range. This report can be conveniently adjusted and recreated to take ongoing plan modifications into account.

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## Executive Summary

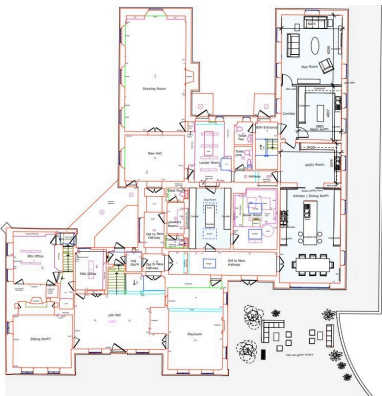
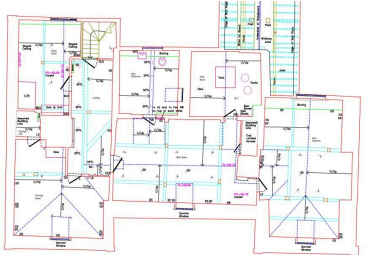
### Overview

The ezWIFI Planner simplifies the process of mapping out your network layout. By uploading a copy of your floor plan, and using the online interface to add additional floor plan feature information, the tool intelligently generates an optimized placement plan and visualization of your access points. This layout proposal can be easily modified and re-generated to get a network plan most suited to your needs.

## Floor Plan Overview

Below is the summarized layout of network infrastructure and expected coverage areas for one or more floor plans. Includes original uploaded floor plan image, proposed coverage area, and number of access points required. ([Table 1](#))

Table 1: FLOOR PLAN OVERVIEW

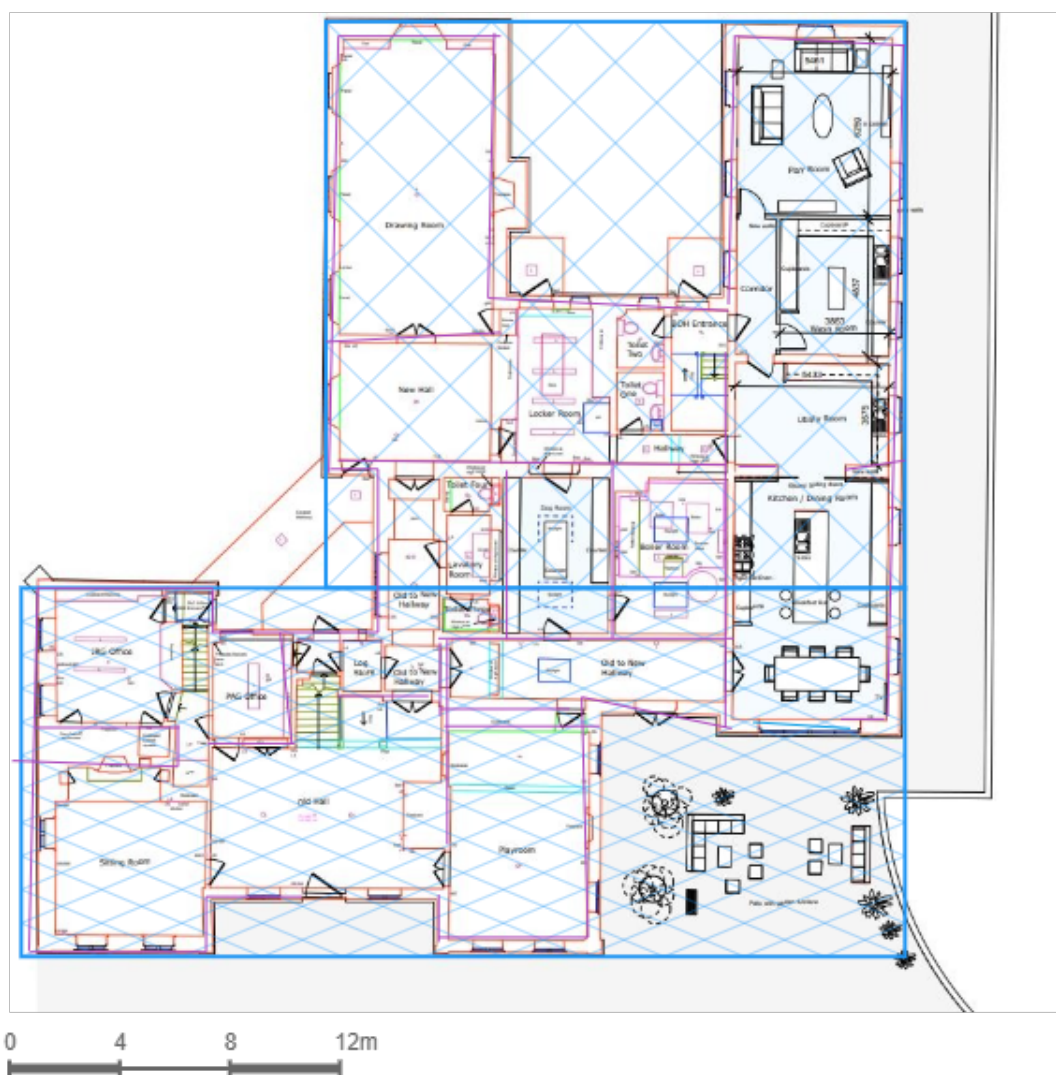
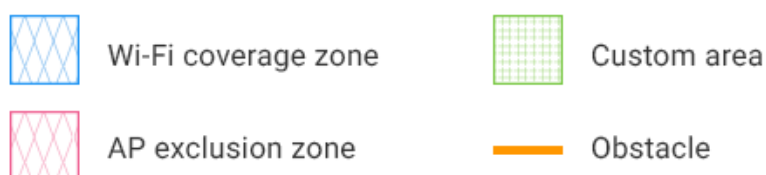
| Name                                                                                 | Floor Plan                                                                          | Coverage Area         | APs |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------|-----|
| 1 Ground Floor                                                                       |    | 861.0 m <sup>2</sup>  | 5   |
| 2 First Floor                                                                        |   | 922.0 m <sup>2</sup>  | 6   |
| 3 Second Floor                                                                       |  | 1739.0 m <sup>2</sup> | 2   |
| Total Floor Plan: 3<br>Total Indoor APs: 13<br>Total Outdoor APs: 0<br>Total APs: 13 |                                                                                     |                       |     |

## Floor Plan: Ground Floor

### Environment Setting

Based on your floor plans provided features, the planner has generated a network specification. Features include: (1) Required coverage areas, (2) Coverage exclusion areas, (3) Potential obstacles to coverage (based on materials such as concrete), (4) other custom areas as indicated. You must provide this information - the more specific your floor plan, the more effective and accurate your results. You can always go back and fine tune your floor plan parameters. ([Figure 1](#))

Figure 1: ENVIRONMENT SETTING



## AP Locations

The tool auto-generates a proposed location for each of your access points, based on the number of access points required. Placements are calculated to create an optimal coverage area across your floor plan. Add additional access points for better coverage. ([Figure 2](#))

Figure 2: AP LOCATIONS

Number of APs: 5



## AP List

This list contains a comprehensive list of your network plans hardware requirements. Including access point model numbers, radio band, channel information, and location of placement. ([Table 2](#))

Table 2: AP LIST

|              | Name | Model Name | Radio Band | Mode | Channel | Channel Size | Power    | Location |
|--------------|------|------------|------------|------|---------|--------------|----------|----------|
| 1            | AP-1 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| 2            | AP-2 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| 3            | AP-3 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| 4            | AP-4 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| 5            | AP-5 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| Total APs: 5 |      |            |            |      |         |              |          |          |

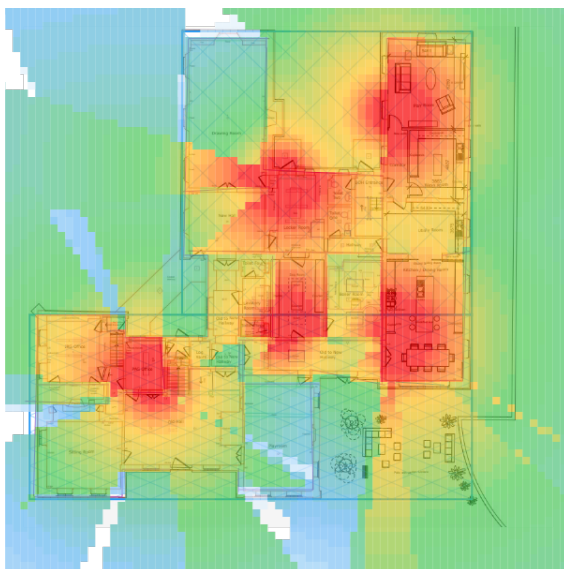
## Signal Coverage

Heatmaps help you visualize the likely signal strength and coverage areas for your floor plan, based on your project's current constraints. Access point locations can be individually changed to generate a new heatmap and visualize other suggested layout options. ([Figure 3](#))

Figure 3: SIGNAL COVERAGE

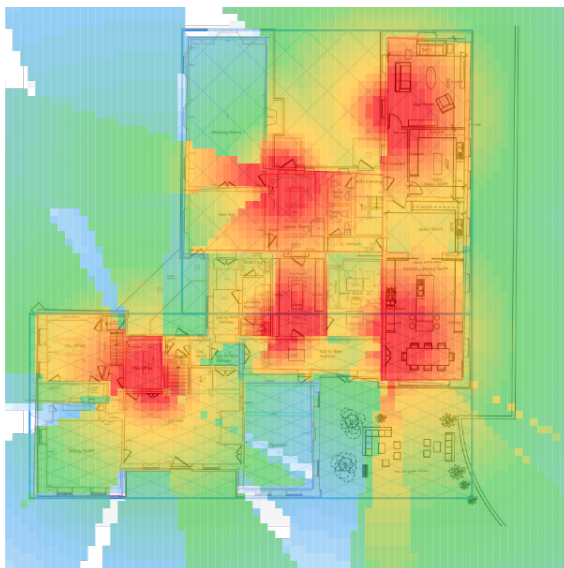
2.4G

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5G

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## Floor Plan: First Floor

### Environment Setting

Based on your floor plans provided features, the planner has generated a network specification. Features include: (1) Required coverage areas, (2) Coverage exclusion areas, (3) Potential obstacles to coverage (based on materials such as concrete), (4) other custom areas as indicated. You must provide this information - the more specific your floor plan, the more effective and accurate your results. You can always go back and fine tune your floor plan parameters. [\(Figure 4\)](#)

Figure 4: ENVIRONMENT SETTING

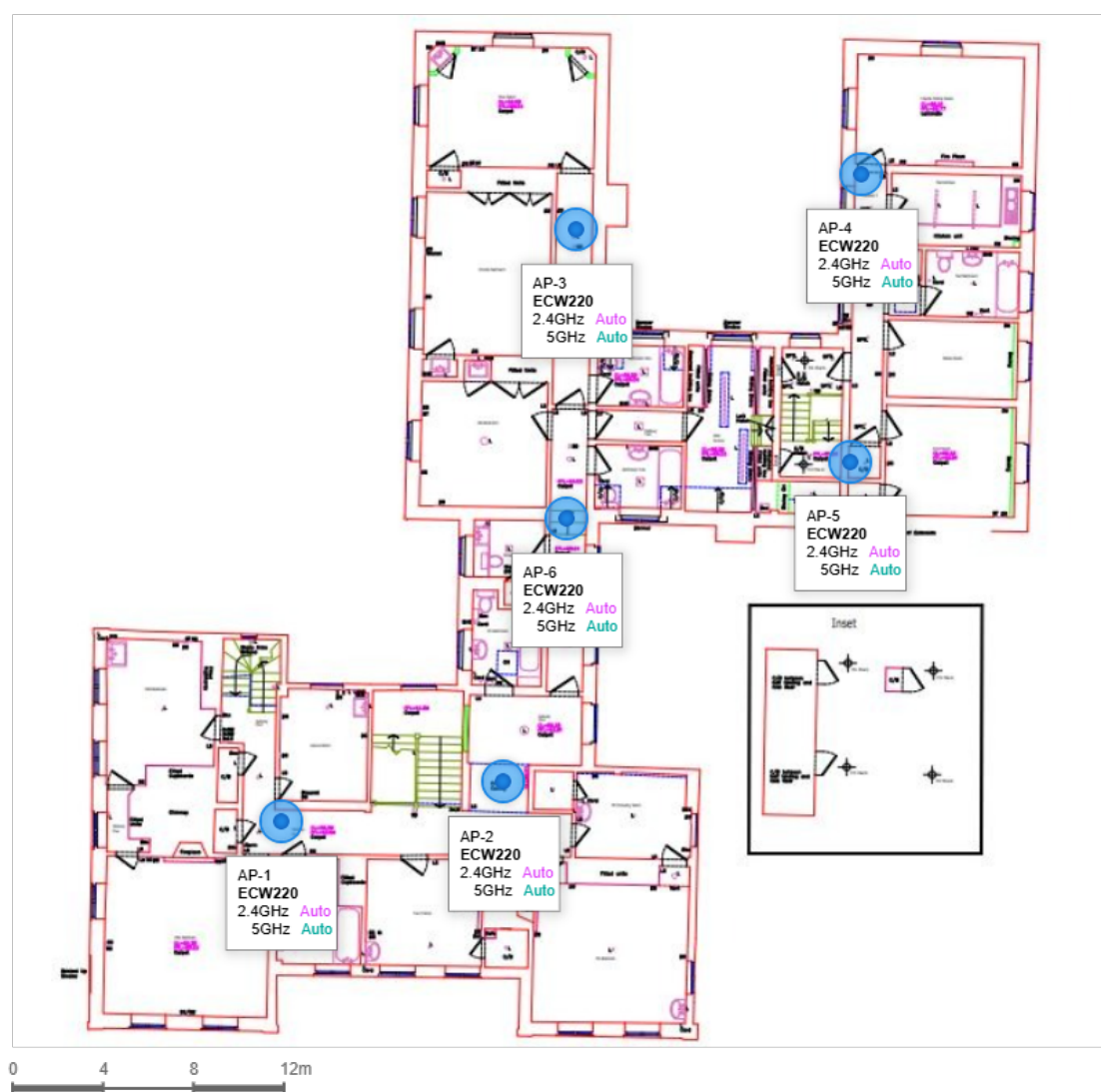


## AP Locations

The tool auto-generates a proposed location for each of your access points, based on the number of access points required. Placements are calculated to create an optimal coverage area across your floor plan. Add additional access points for better coverage. ([Figure 5](#))

Figure 5: AP LOCATIONS

Number of APs: 6



## AP List

This list contains a comprehensive list of your network plans hardware requirements. Including access point model numbers, radio band, channel information, and location of placement. ([Table 3](#))

Table 3: AP LIST

|              | Name | Model Name | Radio Band | Mode | Channel | Channel Size | Power    | Location |
|--------------|------|------------|------------|------|---------|--------------|----------|----------|
| 1            | AP-1 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| 2            | AP-2 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| 3            | AP-3 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| 4            | AP-4 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| 5            | AP-5 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| 6            | AP-6 | ECW220     | 2.4G       | AP   | Auto    | 20 MHz       | 11.0 dBm |          |
|              |      |            | 5.0G       | AP   | Auto    | 20 MHz       | 17.0 dBm |          |
| Total APs: 6 |      |            |            |      |         |              |          |          |