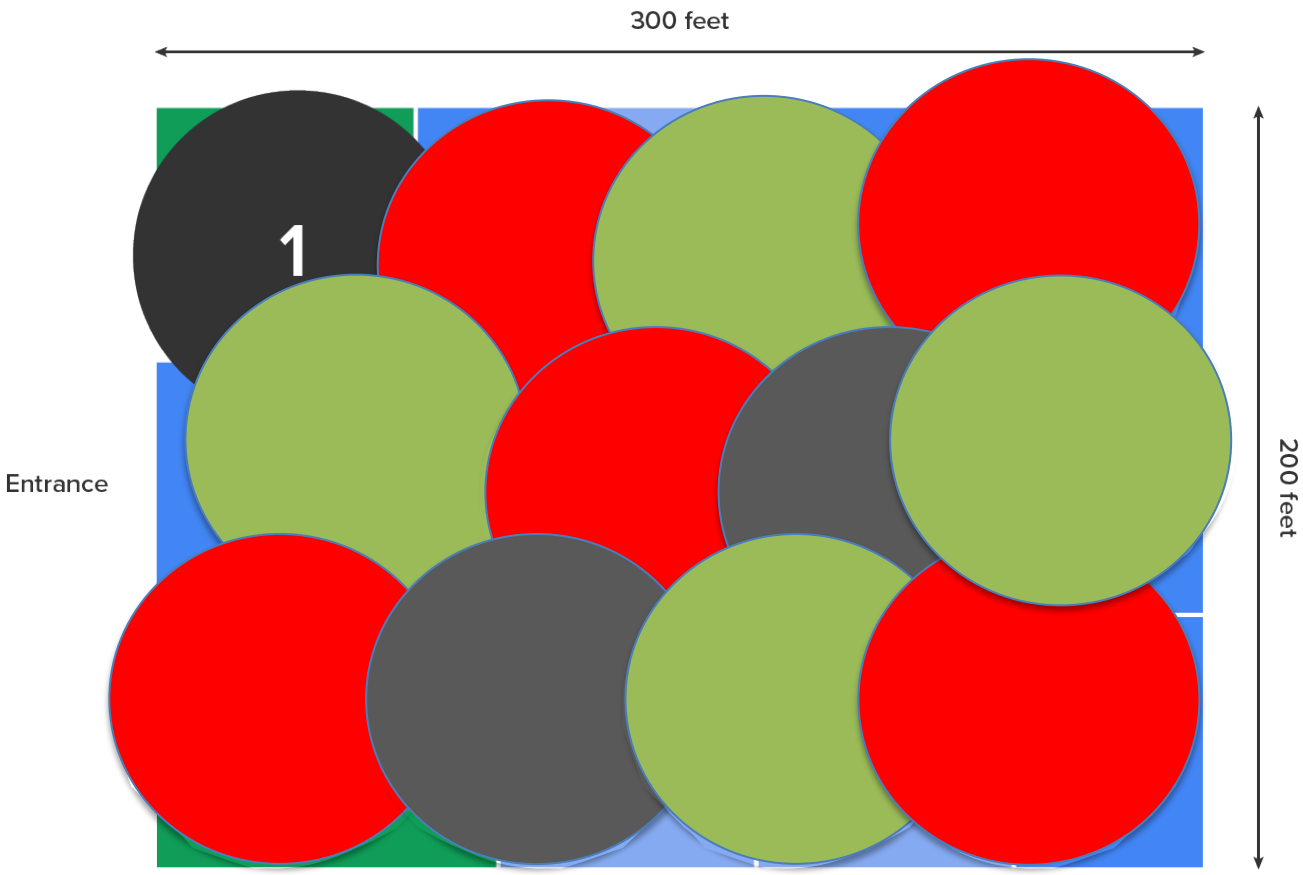
Planning a Wireless Infrastructure

Review the scenario and client expectations about Greenfield Properties. *Make sure you also review the additional client expectations related to this Touchstone Preparation.*

Based on the information provided by the client, answer the following questions in 2-4 sentences each. Be sure to explain your answers in detail.

How many devices will connect to this network wirelessly? Determine the current number of wireless devices currently, and then add 50% for future growth.
Depending on building structure both tablets and smartphone will need to connect wirelessly. 30 – Tablets 38 – Smartphones 68 current devices connect wirelessly 102 wireless devices including 50% for future growth
What network infrastructure components are needed to support the wireless hosts? (Ref: Wireless Networking Components, Site Survey and Installation Configurations)
Wireless AP Network Switches Routers/Firewall Wireless Management Software
On the diagram of the office layout (below), place a circle where you would place each WAP. The distance between WAPs should be from 30 to 70 feet. The office is 200' wide by 300' long. (Here is one circle placed on the diagram, as an example.) Use as many as needed to ensure good Wi-Fi coverage everywhere in the building. Overlap the circles slightly to minimize the uncovered spots. Note: This diagram is just a rough draft to help determine how many WAPs you need; when it comes time to deploy the WAPs, you would use a site survey application to fine-tune WAP placement and channel capacity. Color and label the circle to indicate what channel they should be set to. For example, you might color all the APs that should be set to channel 11 green, and type an 11 in the center of each one. (Ref: Site Survey and Installation Configurations)



Will you assign the same SSID to each WAP? Why or why not? (Ref: Site Survey and Installation Configurations)
Yes. It will provide coverage without having to change networks. The channel spread will enable the coverage to be continuous.
Will you use a wireless LAN controller to manage the access points? Why or why not? (Ref: Installing WLAN Networks)
I would use a controller to streamline the coverage and to simplify configuration and management.

Which Wi-Fi security encryption standard will you enable on the access points? Why did you choose that one? (Ref: Wireless Security)
WPA3 it is the current standard and protects from Man in the Middle attacks.