Background

The National Park Service has been an amazing part of America for many years. The United States Congress made Yellowstone the first national park in 1872. Today, the NPS oversees 417 parks and monuments covering more than 84 million acres. Families plan vacations to explore and enjoy remote areas and nature. The parks strive to provide a safe experience for their visitors. A park ranger not only serves as a source of answers to important questions, park rangers also train and dedicate themselves to be an integral part of safety and the overall NPS experience.

Challenge
(Design Considerations and Constraints)

The 2022 design problem is to design a park lodge for 12 park rangers to live during the 10 months of the year they work in the park.

1. Conduct research on the types of lodges that are in current national parks for employees.

2. Select and identify the location of national park of the team’s choice and incorporate the necessary building codes and materials available in the immediate area.

3. The design must include, as a minimum, a main living area, kitchen facilities, a pantry, library with 4 computer stations, a meeting room for 12 rangers, a storage area, and laundry facilities.

4. The lodge must have 12 individual sleeping rooms that include space for a bed, night stand, foot locker, a three-drawer dresser, a closet, and an exterior window.

5. The design may include one appropriate-sized deck/porch that could serve as the main entrance or an outdoor entertainment/classroom area.

6. Special attention should be incorporated for the source of electricity, water/sewer, and environmentally friendly systems.

7. The finished design can be one or two floors and must be contained on a 150’x200’ plot of land.

8. A 24”x24” site board must be used for submitting the model.