



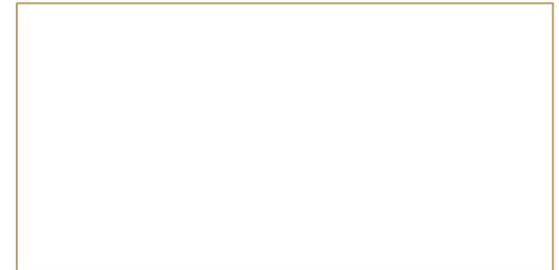
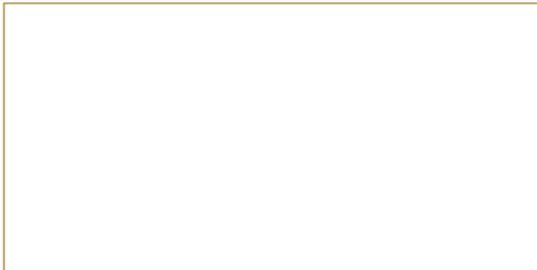
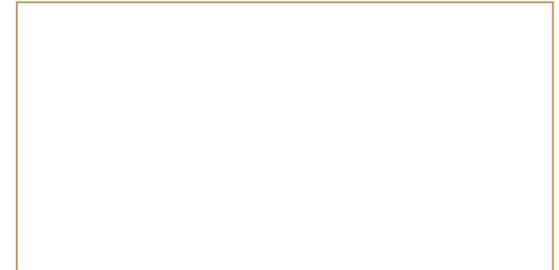
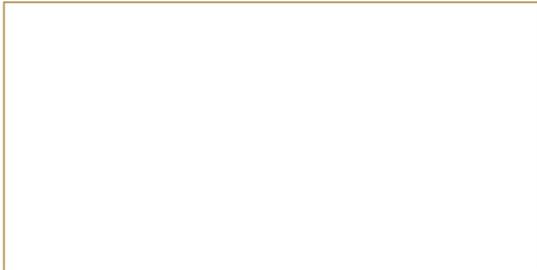
Sustainable Architecture

DESIGN PROJECT

Name:
Group:

Architecture Design Analysis

Research and find an example of a building which is considered sustainable. On this slide add picture(s) of it and notes explaining what exactly makes this building good for the environment.



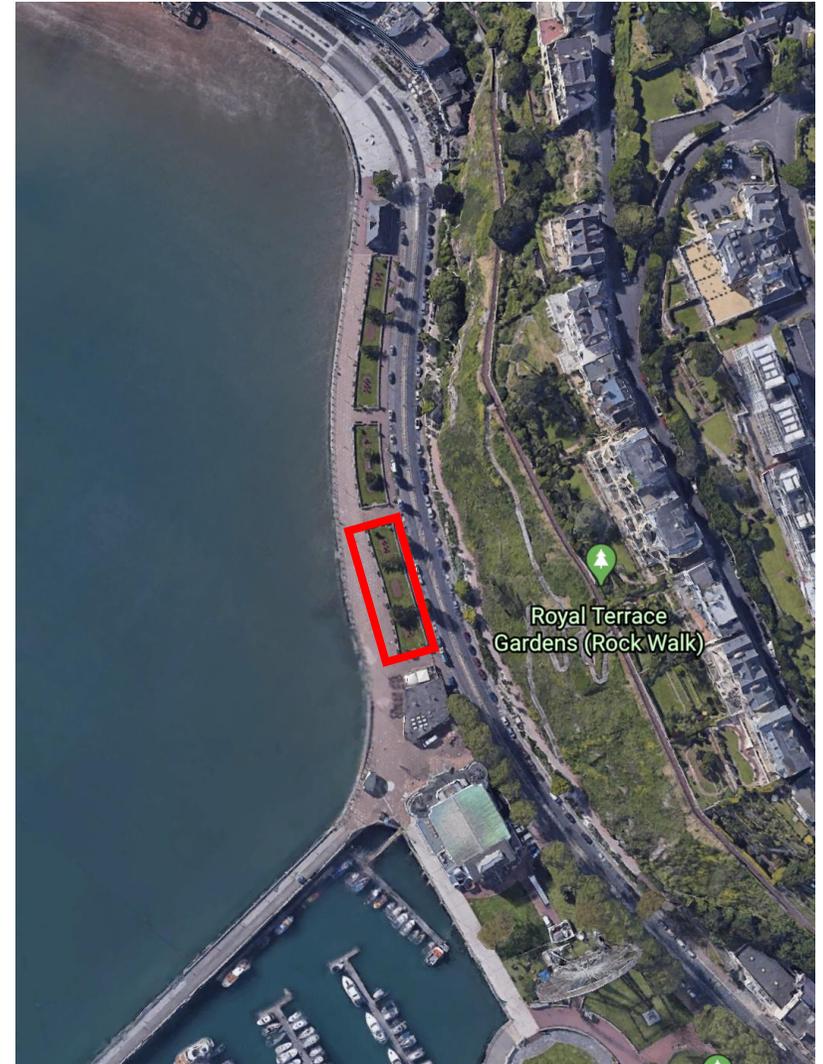
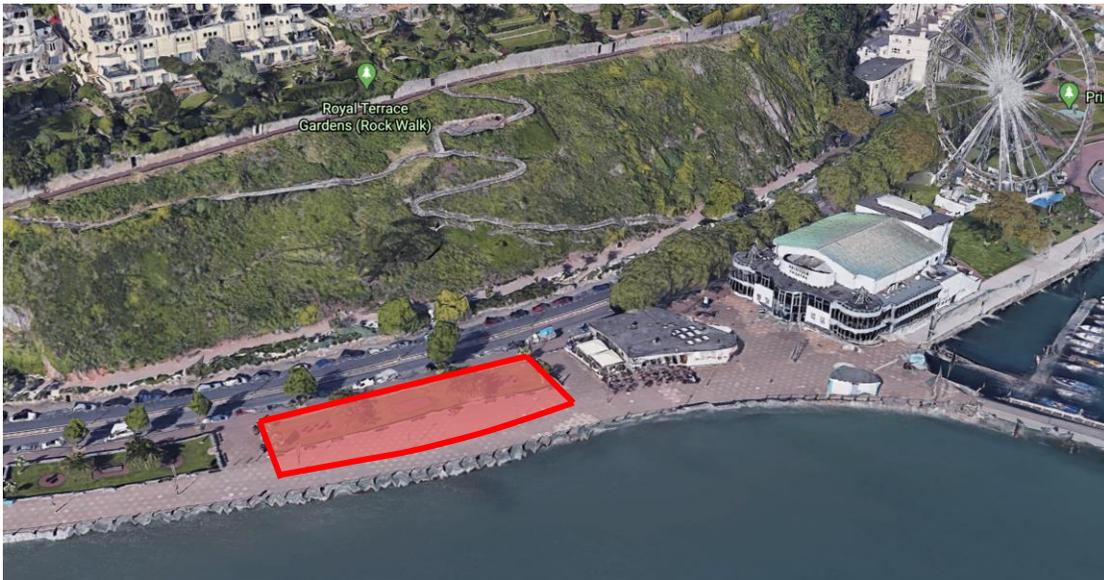
Presenting Initial Design Concepts

You are tasked to design an entertainment/social centre along on a small site along the seafront in Torquay.

You need to research what the contents of the entertainment/social centre would be.

It needs to be single storey and designed to enhance the appearance of the seafront.

It needs to be designed with minimal ecological impact



Stakeholder needs

The building is to be used by tourists and local people of all ages. On this page research what a social/entertainment might include. Look at other centres such as the [Ocean Centre](#) on Exmouth seafront ([click here for more information](#)).



Stakeholder needs

The building is to be used by tourists and local people of all ages. On this page you are to conduct a poll of potential visitors of the centre, to gain feedback on what they would want to see there. You could do this in a variety of ways (a class discussion on MS Teams, ask family/friends), then present the findings of your survey in this space.

Developing of design requirements

Following your research you should now have an idea of what makes a sustainable building, and what it should contain. Remember that the third element of the brief is to have an appearance that enhances the sea front, use this page to start summarising these points.

What will the entertain centre include? Why?

Use this space to upload sketches (scan or photo) of your initial thought of how the appearance will enhance the area.

(Microsoft Office Lens is a good free scanning app for smart phones/tablets)

What could you do to ensure the building is sustainable?

Developing floor plans

Use the image below to plan out how you will use the space to include your planned facilities. Remember it has to be single storey. Use lines and shapes to plan out the spaces for different areas of your building.

Be aware of the scale as you add your floor plan.



3D CAD modelling

Watch the video demos on Google Sketchup, then use Sketchup to model your design for Uruguay's new entertainment centre.

Use this space to superimpose your building into the site in this image (as shown in the video).

[Click here for video Demo on modelling your building](#)

[\(if you haven't used SketchUp before watch these videos and complete these models first\)](#)



3D CAD walkthrough

Watch the video demos on Google Sketchup, then use Sketchup to model your design for Torquay's new entertainment centre.

Once complete use this space (and extra slides if you wish to add them) to present a walk through of your building design and explain your concept using screen shots of CAD model and notes to annotate them.

3D CAD walkthrough

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Sustainability analysis

What are the suggested material choices for your building and furnishing? What is the sustainable impact of using this material?

Material 1 :

Impact of producing/collecting the raw material? Consider pollution, energy used, long term social and ecological impact (eg of deforestation or quarrying)

Transportation – Where does this material originate?

What can happen to this material at the end of its useful life (eg biodegrade, recycle, etc)

Material 2 :

Impact of producing/collecting the raw material? Consider pollution, energy used, long term social and ecological impact (eg of deforestation or quarrying)

Transportation – Where does this material originate?

What can happen to this material at the end of its useful life (eg biodegrade, recycle, etc)

Sustainability analysis

Research the pros and cons of different energy sources on this page and explain your choice of energy source for this building.

Fossil Fuels:

Pros:

Cons:

Nuclear Power (fission):

Pros:

Cons:

Solar energy:

Pros:

Cons:

Wind:

Pros:

Cons:

Tidal:

Pros:

Cons:

Hydropower

Pros:

Cons:

What is/are the best choice of energy source for this building? Explain your choice:

Market feedback

Present your visualisations of your building to the people you surveyed earlier in this project.

How well does this building meet the requirements of the target market?

What are the areas of the design which successfully meet the user's needs? How does it achieve this?

What are the areas of the design which do not fully meet the user's needs? Why does it not? What is missing?

Explain the improvements which should be made to better meet the needs of the target market.