

Oral Problem Statement

20 Possible Points

Here are follow-up questions from the Skanska problem statement team for your team to answer during your allotted time Friday. Upload any documents and files you will need during the presentation by attaching them to the provided Presentation submittal by 6am on Friday, February 5, 2021.

Carbon:

The Owner is having a difficult time understanding what embodied carbon is, and how it differs from operational carbon. Create a visual explanation to share with the Owner to describe what embodied carbon is. Relate it to the St. Petersburg Pier. Be prepared to explain these visuals to the team on Friday and answer questions from the team about them.

Certification:

Is SITES or Envision a better fit for the entire pier project? Be prepared to provide your reasoning and answer questions from the team.

Contractor Well-Being:

Apply the COVID-19 mitigation strategies to the St. Pete's Pier project, assuming the project was impacted by COVID-19 for 10 months. Detail how the strategies you developed are impacted by the project location and type. Address how you plan to communicate these changes to the subcontractors and owner to make everyone feel safe and secure on the jobsite.

Ecology:

There are several areas in the St. Pete Pier that were developed and constructed per design. Choose one of the following areas. Develop a script and present ideas as a skit from a minimum of (3) points of view – design team (architect/engineers), owner, and general contractor. At least one student should represent a different point of view. Discuss why each area would be beneficial or detrimental to the overall project. Reasons can include cost, environmental impacts, community attraction, construction impacts, material usage/availability, etc. The St. Pete Pier website linked on Procore can be used for reference.

- Discovery Center and Wet Classroom
- Fishing Deck
- Walking Waterfront
- Bioswale and Picnic Area
- Pier Plaza
- Spa Beach
- Coastal Thicket

Oral Problem Statement

Owner, Architect, Contractor Meeting

20 Possible Points

Energy:

Explain how you could implement **integrated design** and **tenant awareness** to reduce energy consumption and overall environmental impact.

Resiliency:

Another design team is building a similar pier in the Pacific Northwest and is looking to the Saint Petersburg Pier for guidance to incorporate resiliency in their design. What threats/hazards should they consider in the design of their pier? Are there some that are location specific to the Pacific Northwest? Are there common hazards that stem from the nature and use of a pier? Please prepare a brief presentation of two hazards that are specific to the Pacific Northwest, and two hazards that these piers would have in common. Be prepared to explain your reasoning for these hazards.

Waste:

Minimizing waste streams includes shifting away from the traditional, **Linear Economic** mindset of "take-make-waste" and moving toward a **Circular Economy**. Provide a visual representation of what the major components of the Circular Economy are, how a Circular Economy works, and how it applies to construction materials and waste streams from construction. What are some of the major challenges of implementing a Circular Economic model to the St. Pete Pier?