Problem Statement: To build a scale model of the campanile-carillon that will house 27 bells, can be easily transportable, and functional.

Scissor Lift

- The tower lifting system changed from using the camper design principle to scissor lift mechanism
  - Easier to rise and lower the tower
  - One person to operate with the assistance of an electric motor

Mesh Facade

- The façade changed from solid façade to a mesh banner façade.
  - Reduce weight
  - Withstand wind better
  - Cheaper

Previous Design

- Transportable
- Ease of Assemble
- Withstand 50mph wind gust
- Playable
- Collapsible Tower
- Fit Through Double Doors

Improvements

Estimated Cost

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COST</th>
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</thead>
<tbody>
<tr>
<td>Bell</td>
<td>$145,000</td>
</tr>
<tr>
<td>Trailer, Pallet Jack, &amp; Base</td>
<td>$20,000</td>
</tr>
<tr>
<td>Exterior Cladding</td>
<td>$25,000</td>
</tr>
<tr>
<td>Documentary Display</td>
<td>$20,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$210,000</td>
</tr>
</tbody>
</table>

Wind Load Analysis

Final Design

This poster has been approved for public display by Dr. Tam, Department of Music and Theatre