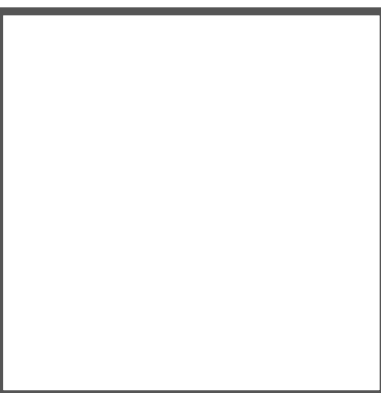




# The Monolith

## A Collective Portrait of San Jose & The Tallest Timber Structure in the USA



**The Monolith is an observation tower with an ever-changing display of portraits of the people of San Jose.**

Locals and visitors alike can contribute their likeness and story to the project and see their image displayed in light at monumental scale as it travels up the 200ft tall tower. Over time, the permanent archive of images and stories will become a living monument to the diversity, generosity, and talent of individuals whose collective stories make San Jose the place that it is.

**All iconic monuments are also marvels of modern engineering, and this project aims to be no different.**

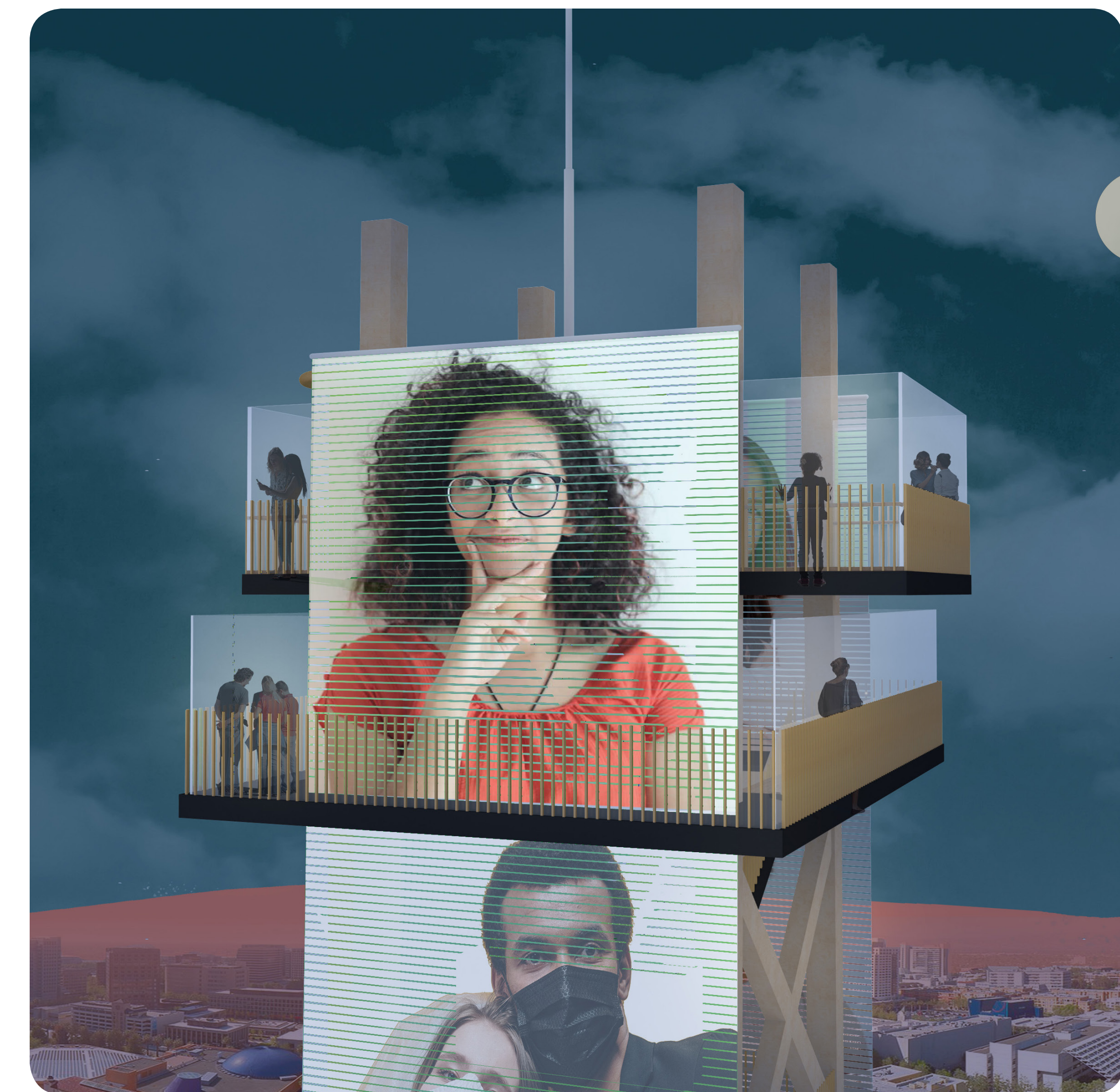
At 200 ft tall, this project will set the record for the tallest wooden structure in the country. Advances in modern cross-laminated and glue-laminated timber technology make this possible in a way that is also lighter, stronger, and more sustainable than any alternative construction method. Use of this all-natural material is a marked move towards contributing to carbon reduction and mitigating the impacts of climate change.



### A Symbol of Time and Place

Silicon Valley is famous for technology, innovation, and progressive values. It is the region that gifted the computer to the world, proliferated the screen, and consequently the selfie. The fleeting photographic portrait-translucent, rendered in light and changing over time, could not be more appropriate as a symbol for San Jose that reflects its significance and impact in the world.

The Monolith's iconic yet timeless form celebrates mankind's past achievements and future possibility. The human figure is truly the epicenter of the project in every way. From the visitor's experience to the visual representation of the human face at monumental scale, it literally and figuratively connects people, their individual stories and journeys, and the place of San Jose.





**1** Monique sees a new monument and is intrigued.



**2** She travels down the public mall toward the tower.



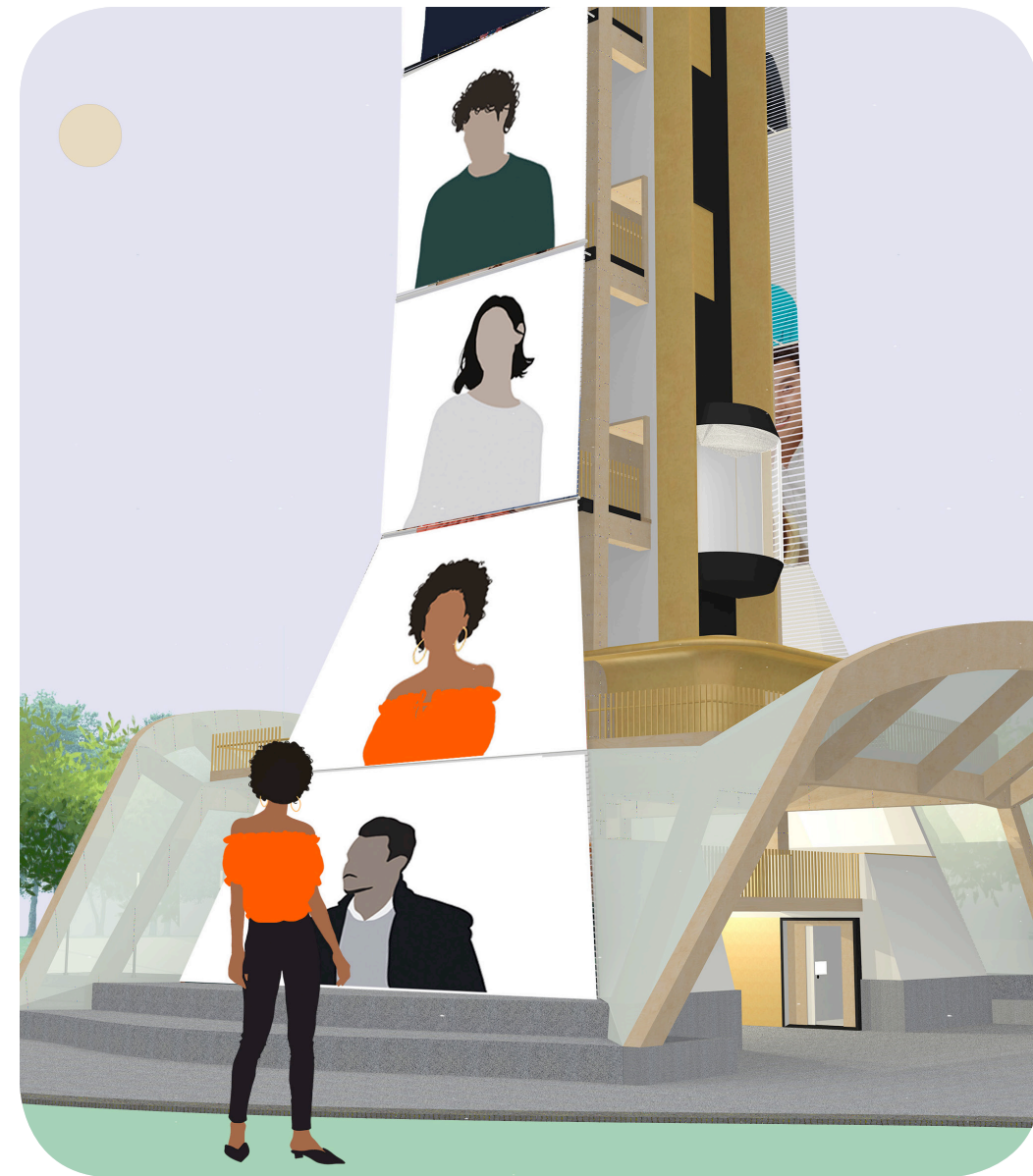
**3** Her curiosity piques when she sees people in photo booths.



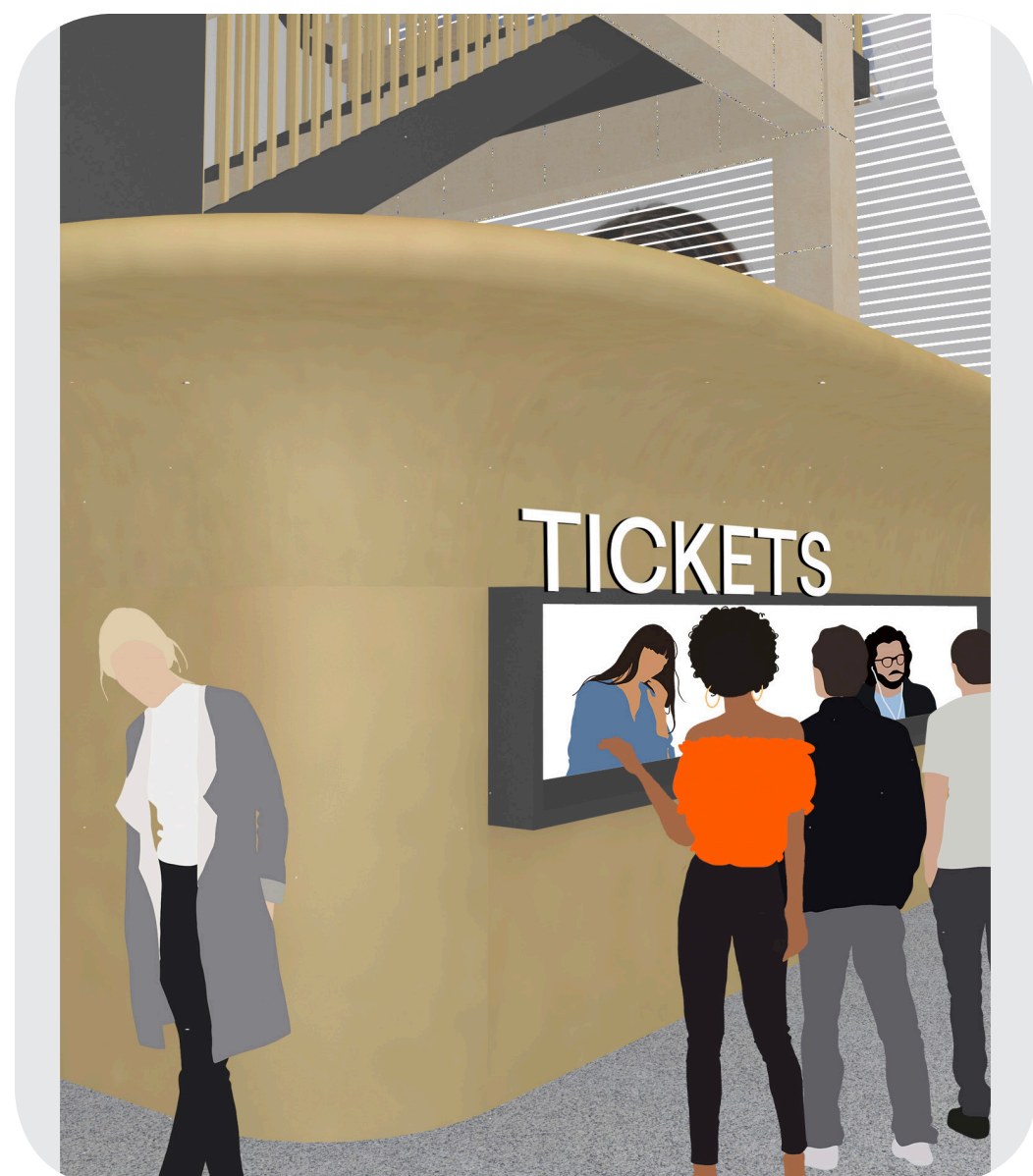
**4** Realizing the photos are on the tower, she takes one herself.



**5** The photo indicates the time window to see her tower selfie.



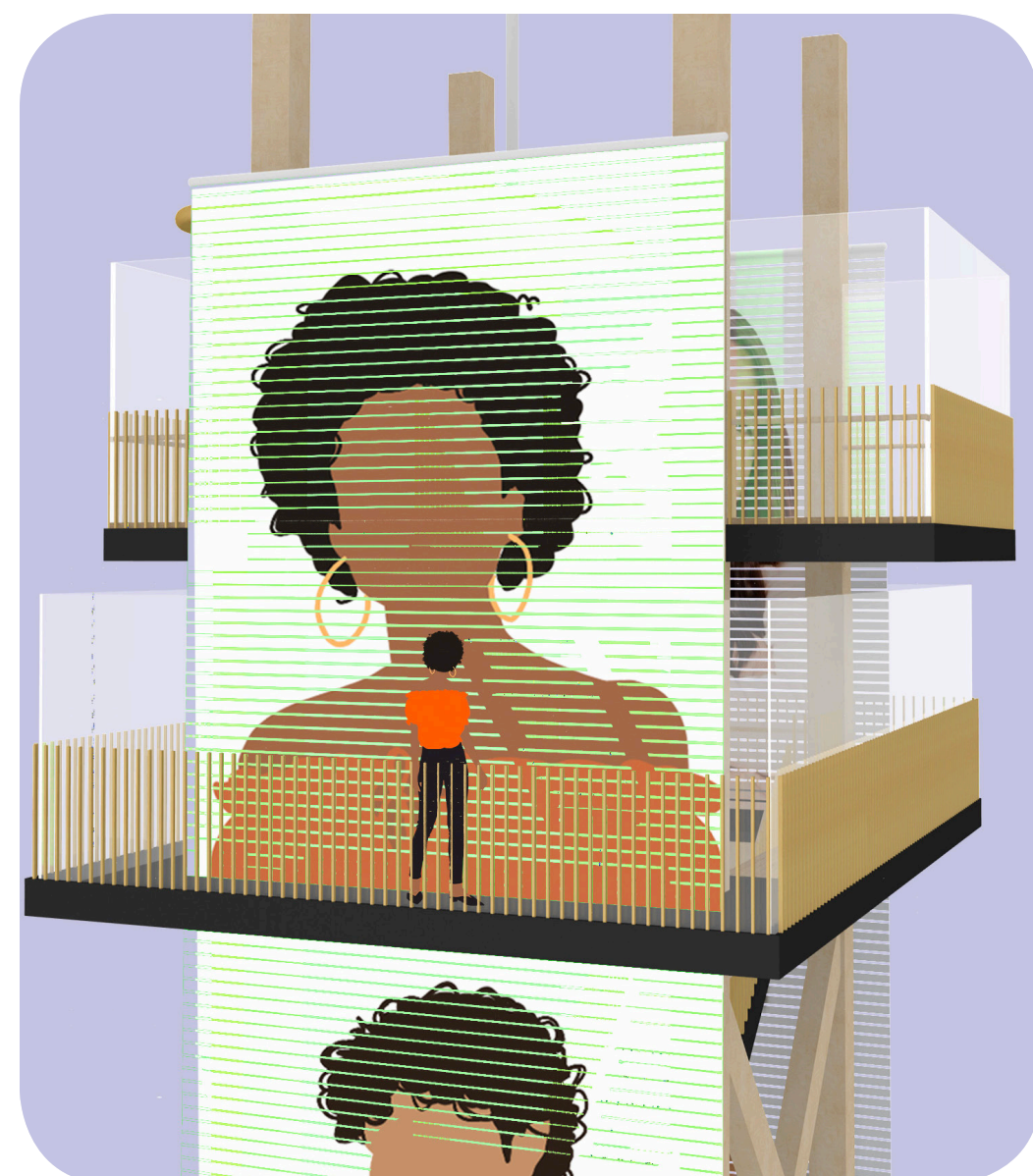
**6** She exits to see her selfie as it begins moving up the tower.



**7** Wanting to see the view, she then buys an overlook ticket.



**8** Monique travels up the lift and admires the view of San Jose.



**9** At the top, she sees her portrait at a monumental scale.

### Engineered Timber Structure

The overall structure made of engineer timber and steel connections is comparable to steel or concrete in strength, but at a fraction of the weight. Precision pre-manufacturing means minimal construction tolerances and increased speed, efficiency and reduced waste during construction, while also reducing amount of on-site workers and noise disturbance. Further efficiencies are gained through prefabricating openings and service voids, reducing waste on site.

This system is made up of the following components:

- A Glulam®/CLT Beams
- B Glulam®/CLT Columns
- C CrossLam® CLT Panels
- D Steel Connections/Devices (brackets, caps, etc.)

All are prefabricated to provide the highest degree of accuracy and to simplify and accelerate construction on-site.

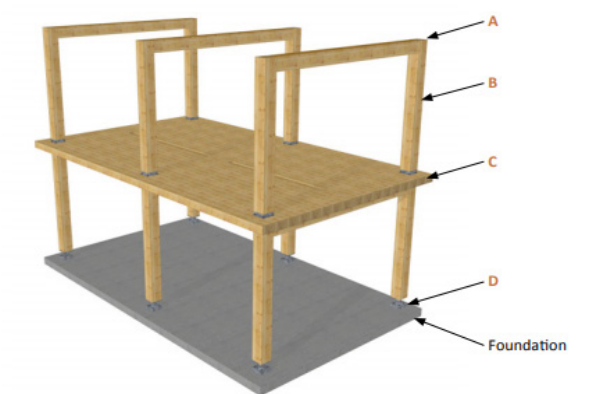


Image Source: Structurlam

### Steel Reinforced Cross-Bracing

Structural cross bracing provides lateral stabilization and stiffening as needed for the towers slenderness and height.

### Fire Resistance

CLT has inherent fire resistance characteristics through its ability to char and protect its interior structural integrity. This, in combination with other common practices can achieve the necessary resistance to fire.

### The Mall

Public grounds of Arena Green are enhanced with hard and soft landscaping, creating a promenade that enhances and provides additional improvements and amenities to the park.

### Services and Safety Zone

Ample space for services and life-safety

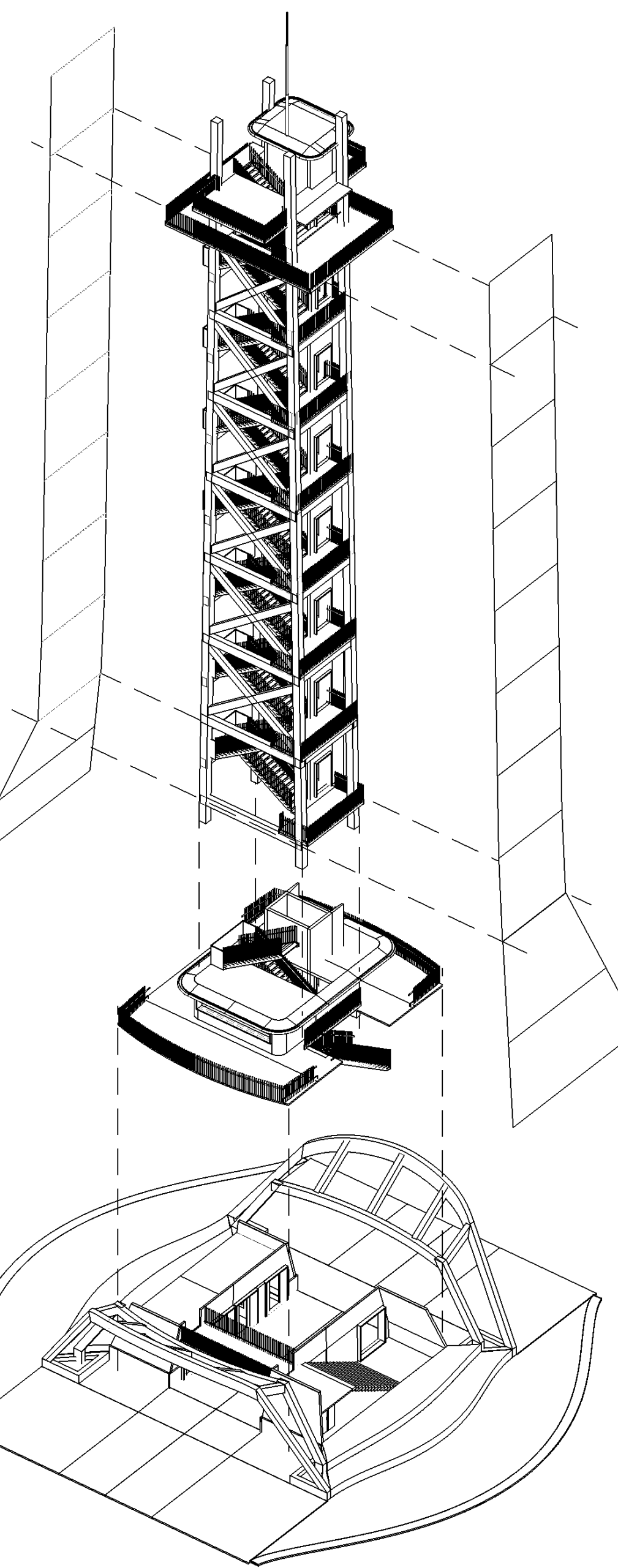
### Reduced Seismic Foundations

The reduced weight of CLT structures can significantly reduce the requirement for foundation, resulting in reduced volume of concrete in ground works. Under exceptional loads, such as from earthquakes, CLT and its connection can flex and absorb vibrations, acting as a damper.

## 100% Carbon Neutral

As humans reassess our relationship with the planet, this project presents an opportunity to set an example that can not only achieve net zero, but also begin to reverse the damage to the environment caused by global warming through it's use of CLT.

These preliminary measures will be further researched and developed in future stages.



### Glazed Observation Lift

Glass enclosed lifts will offer the admission-paying public unparalleled views and experience travelling up to the observation deck.

### Observation Deck

The observation deck at a top of the tower is accessible by stair and elevator, and will be designed to meet all applicable local and international building codes for accessibility and emergency egress. Access can be ticketed, therefore allowing the monument to generate revenue for operations and maintenance. Further revenue can also be generated by booking for private events.

### LED Mesh Screen

LED lighting strips are woven into a transparent mesh that creates the giant display screens. The custom mesh will be developed to achieve the right level of brightness, resolution, and energy consumption to meet project requirements. These parameters are easily adjusted by changing the density of LED's and open area in the mesh.

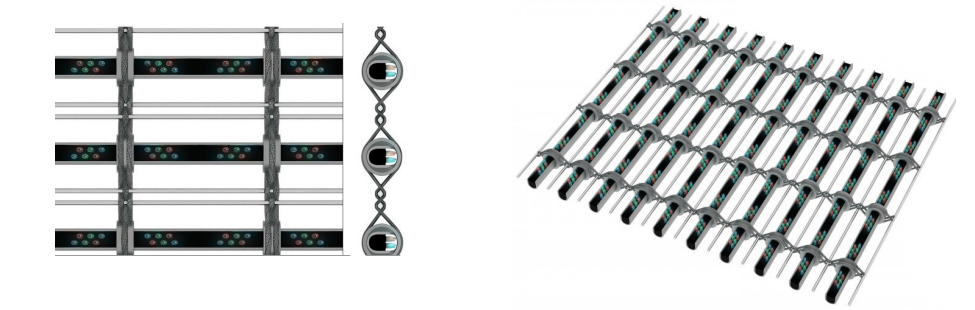


Image Source: GKD MediaMesh

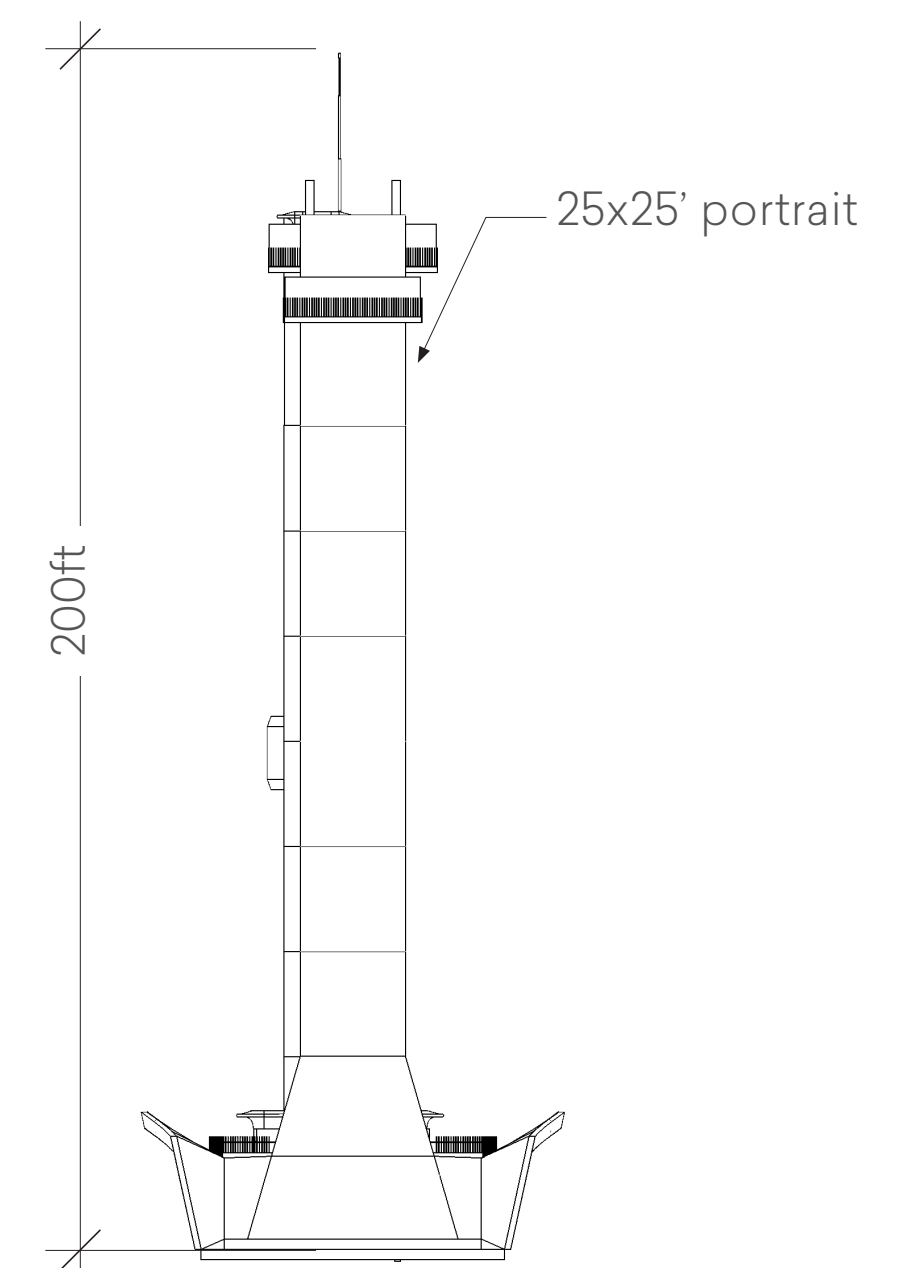
### Ticketing Level

Provides security and lift access to the observation deck, and is staffed by security personnel and ticket agents who are paid by the income generated through ticket sales and events.

### Public Photo Booth

A carefully thought-out and designed user experience on the ground floor photo-booth area makes user participation smooth and fast. Users are able to interactively contribute their image as individuals or in small groups. They can also review and select their favourite image on demand, and contribute additional text/story to the archive online at any time.

### Front Elevation



**Trees** absorb CO2 as they grow and using their timber to build creates a long-term carbon store, effectively offsetting emissions during construction.

**Wood** is a 100% renewable resource that is local, natural, and abundant. When we cut them down we can replant and maintain the carbon cycle, while also contributing to reforestation and halting global warming.

**CLT** is an efficient and strong material that reduces pollution and embodied energy compared to alternative materials and construction methods.

During its **operational lifespan**, the project will use 100% renewable energy. This is already available through the City of San Jose's TotalGreen energy program.

All additional **CO2** will be tracked during construction and operation, and offsets will be purchased for any overrun.

At the end of its **life-cycle**, wood can be recycled or burned for clean energy, therefore partaking in the new circular economy and setting a benchmark for future projects of its kind.