The National Star
Guiding America’s Brilliance into the Future

A collection of murals and quotes in a public gathering space that represent the United States in the 21st century displayed on the exterior walls of five monumental pillars. The triangular pillars form the five points of a bird’s eye view star with internal elevator access to a rooftop glass-enclosed observation deck at the top of the tallest pillar. The angled pillar roofs allow the star motif to be seen at ground level from a distance.

Observation Deck

The star is oriented so that the observation deck points directly East away from D.C. This allows for a scenic panorama of the Nation’s Capital, looking out over the rest of the site grounds and down East Capitol Street NE towards the U.S. Capitol building. Doing so grants a view over Kingman Lake and the Anacostia River, as well as a view up East Capitol St. SE.

Located at the top of the tallest pillar, elevator access allows the deck to be reached by all.

Exterior Murals

Murals encompass the ideas of SPICE analysis when examining a nation during a desired period of time. Social, political, interactions with humans and the environment, cultural, and economic themes are considered the key components to a nation’s whole. The artwork is large and simplistic in style, in order to be easily seen and interpreted from ground level.

Site Location

The lot selected previously housed the Robert F. Kennedy Memorial Stadium in Washington, D.C. While once home to many of DC’s sports teams, the Stadium is now defunct and unused. Located 2 miles east of the U.S. Capitol building, the stadium’s property encompasses a number of lots along the Anacostia River. The portion of these lots developed for the purposes of this project are between C St SE, Independence Ave SE, and 22nd St NE where the stadium previously stood (picturec right). This allows for physical connection between the Nation’s Capital, a critical part of America during recent centuries, and scenic views of the city from The National Star.

Symbolism in Design

Location/Orientation: The selected location allows the orientation of The National Star to be aligned with the National Mall and the U.S. Capitol; the linear alignment with these important parts of our Nation’s Capital and its past symbolize that although we are continuing to move along our perceived linear path in time, we can still choose to move in new directions throughout the rest of the 21st century, represented by the 5 points of the star.

General Design: The use of a star as the landmark’s main icon represents two aspects of the United States: Stars are considered a symbol of the success of the United States and their use is meant not only to represent this American essence but their recognition as a symbol of what is striving for as well. The latter meaning applies to American excellence and its influences in the past (such as various democratic countries’ constitutions being based after its own) and our own desire to move towards greater things in the upcoming century.

Murals: The symbolism of the past, present, and future of the United States is incorporated in the organization of the pillar’s murals. The base of each pillar is painted by local artists with scenes from the beginning of the 21st century; the further up the sides of the pillars, the closer the mural subjects are to the present.

Each pillar represents a different category of SPICE (social, political, interactions with the environment, cultural, and economic), with corresponding images in the murals. Only the lowermost 20% of the pillars will be completed at the time of the pavilion’s construction, emphasizing the fact that the present is always developing as America progresses through time. As the 21st century develops, additional murals will be commissioned.

Observation Deck: The observation deck at the top of the tallest pillar represents the future in the vertical progression of time; the images from the past decades in the murals transition to the blank canvas that is the present, to the transparent observation deck. The people standing on the observation deck are people who will be part of the future; they serve to represent it as a diverse, living and ever-changing part of the pavilion’s symbolism.

Design Process

As our work expanded, we transitioned from club membership to working on our response to this year’s design challenge, meeting at least every other week to work and learn from project-relevant guest speakers.

Phase 1: Prompt Selection
- Brainstorm session to conceptualize ideas for all prompts
- Weighed pros and cons of each idea
- Used group vote to select prompt
- Overcame challenges when trying to agree on ideas to come to a successful compromise

Phase 2: Site Selection
- RFK Stadium is a large venue in the DC area not being used
- Not near any other major monuments that would take away from the impact of the National Star
- In an area of DC that does not have many major establishments creating revenue, it would boost the economy, and lead to further developments.
- In line with the Washington Monument and the US Capitol making the site significant for a monument

Phase 3: Focus
- Although other ideas were considered, the ultimate focus chosen was for an open-air destination that symbolically represented the values of the prompt
- Finalized star shape as a major part of the focus of the design
- Improved collaboration skills while developing the project’s focus

Phase 4: Further Development
- Focused on other prompt requirements
- Developed the mural concept as Social, Political, Interactions with the Environment, Cultural, and Economic themes
- Mini-groups were formed to tackle different aspects of the project with check-ins and group discussions leading to final decisions
- Summative data and visual elements were developed
- Guest speakers were invited to speak on specialized topics related to the design - cost estimation, security, landscape design, etc.
**Materials**

- **Reinforced Concrete**
  - Cash-in-place reinforced concrete to be used for the tower structure.
  - By adding the reinforced steel bars within the concrete the building becomes stronger in tension and more cost effective.

- **Recycled Rebar**
  - At least 25% recycled steel used as rebar in the concrete.
  - Very strong and durable material used in a variety of ways to protect and ensure safety of visitors.

- **Limestone**
  - Aesthetically pleasing flooring for the monument.
  - A durable and cost-effective material for its life cycle while also having a "monumental" aesthetic similar to other landmarks in D.C.

- **Tempered Glass**
  - Durable construction glass used for the observation deck.
  - It is impact-resistant and presents a low risk to visitors in the event of failure.

**Construction Techniques**

This monument will be a design-build project built with traditional and modern building methods using a wide variety of subcontractors. This will also be a DC First project, creating more local jobs rather than outsourcing.

**Structure & Architecture**

The star-shaped monument comprises a decagon with each side being 75 feet long. Each point of the star is a reinforced concrete tower sloping 28 degrees at the top, with steel framing at the observation deck. The sloped pillars allow the star design to be visible and easily recognizable from a distance.

**Strategy for Sustainability**

The monument will be constructed out of sustainable and long-lasting materials, such as low-carbon emission concrete and recycled steel reinforcement. The development of the surrounding area will expand DC’s green space and promote an environmentally sustainable culture.

**Size and Scale of the Project**

The pavilion will be a welcome addition to the Washington, DC skyline with the tallest pillar towering 300 feet in height. The two western pillars are 200 feet while the middle pillars stand 250 feet tall. These heights are similar to many other buildings in DC as limited by the city building code. By comparison the Washington Monument is twice the height as the tallest tower of the National Star.

**Security**

To protect the people visiting the monument, basic security features such as cameras, security guards and proper lighting will be implemented throughout the site. To secure the observation deck, the monument entrance will contain a screening vestibule containing x-ray machines and metal detectors. A capacity limit will additionally be provided to prevent overcrowding. To protect both pedestrians and the structure from vehicular threats, anti-ram bollards and planters will be placed around the designated parking areas.

**Construction Timeline**

The first star represents the completion of the first pillar and the second is for the start of the planting season.

**Cost Estimate / Feasibility Study**

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<th>Categories</th>
<th>Cost Total</th>
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<td>Total Construction Cost Per Square Foot of Site* Developed</td>
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*Total Square Footage of Site = 442,000 Sq Ft

During the feasibility study, access and location were strongly considered when determining the project site. Selling points for this site included existing parking lots and public transportation to ease the barrier of access for visitors. We considered built in retail space and contrasted it with pop-up shops. The cost estimate aligns with pre-existing memorials in D.C.