MIGUEL ROSALES

LEAD BRIDGE ARCHITECT PORTFOLIO

ROSALES+

BRIDGES AS STRUCTURAL ART

Miguel Rosales

President Rosales+

Specialized bridge design and architecture

Miguel Rosales is the president and principal designer of Rosales+, with more than thirty-five years of expertise as a leading architect and designer for major bridges both in the U.S. and abroad. Renowned for his focus on bridge aesthetics and design, he earned a licentiate degree in architecture from Universidad Francisco Marroquín in Guatemala in 1985, and completed a master's degree in architecture studies at Massachusetts Institute of Technology (MIT) in 1987.

He has received grants from the NEA, AIA/AAF, and MIT to research bridge and infrastructure design and is the recipient of numerous national and international bridge design and engineering awards. He is known for his ability to balance technical and aesthetic principles, conceiving cost-effective architectural bridge enhancements and delivering iconic bridges.

He is the author of *Bridges as Structural Art*, showcasing twenty-five of his transformative bridges. These iconic structures have become sources of pride for the communities in which they were built and tangible expressions of the art of bridge design.

Through his contributions, he has established himself as a leading figure in his field, influencing both design and engineering practices globally.

SUMMARY OF EXPERIENCE

- Rosales+, Boston, MA President, 1997 to present
- Wallace, Floyd, Associates Inc., Boston, MA Senior architect / urban designer, 1988–1995
- Stull & Lee Inc., Boston, MA Architect / urban designer, 1987–1988
- Beacon Companies, Boston, MA Urban design consultant, 1987

EDUCATION

- Massachusetts Institute of Technology, 1987 Master of science in architecture studies
- Universidad Francisco Marroquín, 1985 Licentiate degree in architecture
- University of Florida, 1984 Historic preservation program

REGISTRATIONS

- Registered architect in Florida, Illinois, Iowa, Kentucky, Maryland, Massachusetts, New York, Texas, Washington, and West Virginia

VISITING CRITIC AND LECTURER

- Universidad Francisco Marroquín, Guatemala City, Guatemala
- Swiss Federal Institute of Technology, Zurich, Switzerland
- Massachusetts Institute of Technology, Cambridge, MA

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Zakim Bridge

Boston, MA

Type: **Cable-stayed**

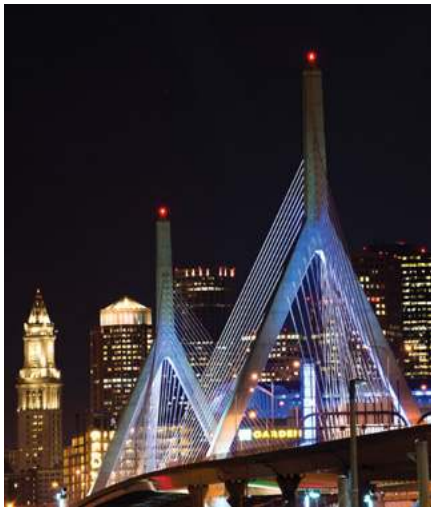
Services: **Conceptual and preliminary design**

Cost: **$115 million**

Client: **MassDOT**
10 Park Plaza, Suite 4160
Boston, MA 02116

A part of the Boston, Massachusetts, Central Artery/Tunnel Project, the Leonard P. Zakim Bunker Hill Memorial Bridge is one of the widest cable-stayed bridges in the world and the only asymmetrical cable-stayed bridge in the United States. The bridge carries ten lanes of traffic: eight interstate lanes passing through the towers and two local traffic lanes cantilevered on the east side, outside the towers. The towers recall the shape of the historic Bunker Hill Monument in neighboring Charlestown, while the bridge's overall form echoes the shape of the sailboats that navigate the inner Charles River Basin and Boston Harbor. The bridge is a striking addition to the Boston skyline and a new symbol of the city.

* Contributions from Miguel Rosales, who was part of a consultant team, prior to the formation of Rosales+.



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Bridge Details and Aesthetic Enhancements

- Concrete towers with faceted surfaces that help the bridge appear slender from a distance due to the light/shadow effect created by the tower cross section.
- Bridge deck openings in the median and in the space between the eight-lane main roadway and the two-lane cantilevered ramp help bring sunlight to the water, mitigating shadow impacts for fish migration into the Charles River from Boston Harbor.
- Cable anchors were designed to clearly show how the cables attach to the deck, emphasizing their cylindrical shape and function.
- Shape of the upper portion of the towers inspired by the adjacent Bunker Hill Monument.

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Puente Centenario

Panama City, Panama

Type:	**Cable-stayed**
Services:	**Conceptual and preliminary design** **Architectural visualizations** **Physical models**
Cost:	**$120 million**
Client:	**Ministerio de Obras Públicas de la República de Panamá** **Paseo Andrews** **Albrook Edificio 810-811** **Ciudad de Panamá**

Puente Centenario is a slender cable-stayed bridge carrying six lanes of traffic across the Panama Canal. The bridge has one of the longest spans of its kind in Central and South America. The vertical navigational clearance allows large vessels to pass below and accommodates a future canal expansion. The towers support a single plane of cables anchored along the median. The bridge is visible from great distances and contrasts dramatically with the surrounding rainforest. Aesthetic lighting illuminates the towers at night, making the bridge the sole focal point in an otherwise dark setting. Designed throughout to appear modern, streamlined, and elegant, the Puente Centenario is a fitting landmark for Panama and its people.

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Bridge Details and Aesthetic Enhancements

- Tapered, slender concrete towers with vertical rustications to improve proportions.
- Concrete box system with wide cantilevers that create shadow lines along the bridge facade, making the structure appear slender from a distance.
- Consistent materials, texture, and color for the entire bridge, including the superstructure and towers.
- Aesthetic lighting to enhance the crossing of the canal.

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Fore River Bridge

Quincy, MA

Type:	**Vertical lift truss**
Services:	**Conceptual and preliminary design** **Community participation** **Architectural visualizations**
Cost:	**$300 million**
Client:	**MassDOT** **10 Park Plaza, Suite 4160** **Boston, MA 02116**

The new Fore River Bridge connects the cities of Weymouth and Quincy, Massachusetts. The vertical lift movable bridge has tall towers visible from the distance marking the river crossing. The bridge includes sidewalks and bike lanes to improve multimodal connectivity in the area. The bridge integrates into the urban context and its architecture is inspired by the art deco detailing of the 1936 bridge that was demolished in 2004 at the same location. Special detailing has been provided to enclose all utilities, stairs, and elevators along the entire height of the two elegant towers. A stainless-steel, high-strength mesh provides a surface that is attractive during the day and night. The bridge is illuminated with blue LED lighting that enhances the gateway experience across the Fore River and the South Shore.

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Bridge Details and Aesthetic Enhancements

- Use of stainless steel semitransparent mesh enclosure for towers and control center helps to conceal utilities, stairs, and vertical mechanical circulation to enhance tower facades.
- Well proportioned approach piers with Art Deco architectural detailing.
- Contemporary art deco–inspired detailing and articulation of safety railings, roadway light poles, concrete piers, and steel towers.
- Architecturally integrated controlled center room within main tower.
- Light-gray structural system that complements the marine environment and use of a vibrant orange to identify movable counterweight components.
- Aesthetic blue lighting enhances the bridge at night.

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Clearwater Bridge

Clearwater, FL

Type:	**Concrete box birder**
Services:	**Conceptual, preliminary, and final design**
Cost:	**$48.5 million**
Client:	**Florida DOT District 7 11201 N Malcolm McKinley Drive Tampa, FL 33612**

The elegant concrete bridge over Clearwater Bay connects two waterfront neighborhoods and the beach to the mainland. The bridge consists of concrete tapered box girders and carries two lanes of traffic in each direction with a sidewalk on each side connecting downtown Clearwater with Clearwater Beach. Its tapered architecturally enhanced piers and the scenic overlooks enhance waterfront views. Its uncluttered, clean appearance and aesthetic highlight the bridge from the bay. The areas adjacent to the bridge have undergone new development due in part to the attractive crossing.

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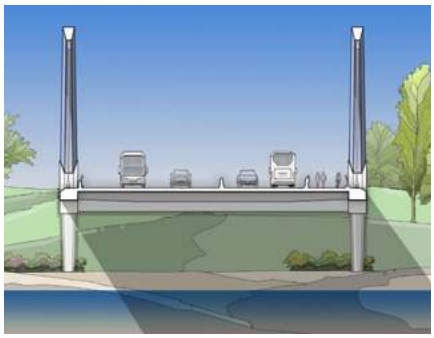
Carver Bridge

Des Moines, IA

Type:	**Tied single arches**
Services:	**Conceptual, preliminary, and Final design** **Community participation**
Cost:	**$22 million**
Client:	**City of Des Moines** **City Hall, 400 Robert D. Ray Drive** **Des Moines, IA 50309**

The George Washington Carver Bridge in Des Moines, Iowa, crosses over the Raccoon River as part of the Martin Luther King Jr. Parkway. Framed by two arches, the bridge provides three roadway lanes in one direction and two roadway lanes, and one bike/pedestrian lane in the other. The roadway is suspended by cables from the elegant steel arches. The main supporting structures and freestanding arches are visible at the roadway level. This makes the bridge transparent and preserves views of the riverbanks and the cityscape, creating a unique driving experience in the city. The blue arches complement the surrounding greenery and clearly mark the river crossing, creating a welcoming gateway into the city from the airport. The arches appear to float over the water framing the views of the skyline and Iowa's tallest skyscraper. The George Washington Carver Bridge has become a new symbol of Des Moines.



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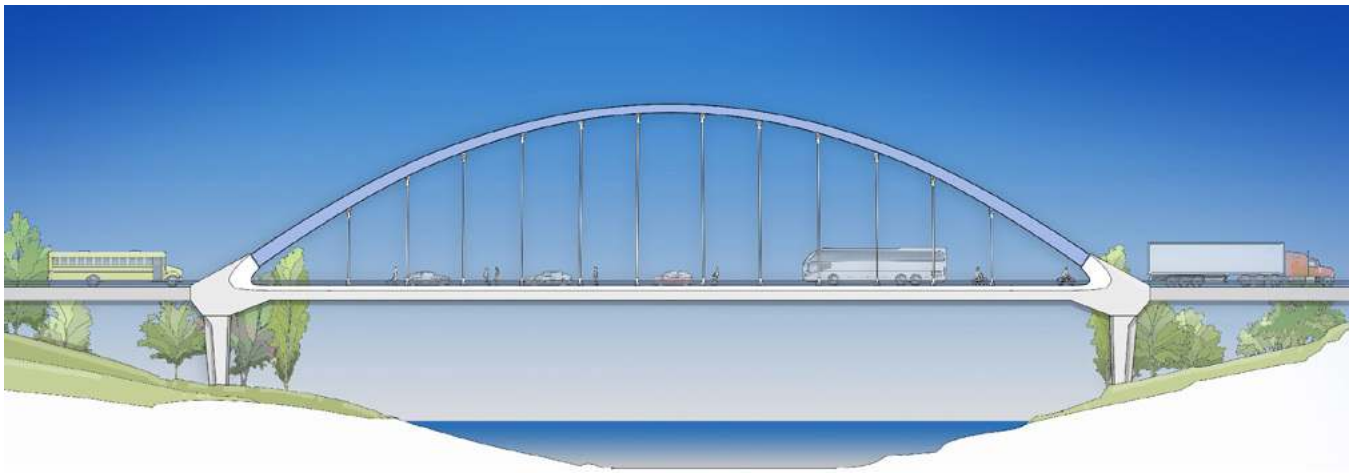
Bridge Details and Aesthetic Enhancements

- Distinct blue color visible from long distances to mark the bridge crossing over the river and proximity of downtown from the airport.
- Aesthetic lighting enhances the bridge at night.
- Pedestrian railings integrated into the overall arch form.
- Elimination of bracing between arch ribs for visual clarity, structural simplicity, and to frame city views.



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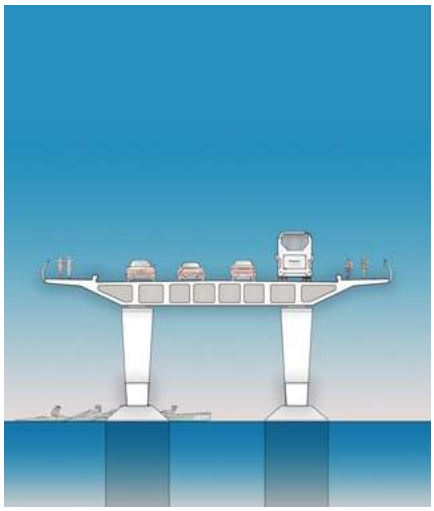
Panther Island Bridges

Fort Worth, TX

Type:	**Concrete box with V-shaped piers**
Services:	**Conceptual, preliminary, and final design** **Aesthetic lighting design** **Construction supervision**
Cost:	**$ 90 million (3 bridges)**
Client:	**City of Fort Worth** **City Hall, 200 Texas Street** **Fort Worth, TX 76102**

Three new Trinity River Vision bridges will cross over a future bypass channel in downtown Fort Worth, Texas. The bridges on White Settlement Road, Henderson Street, and North Main Street provide a pedestrian-friendly experience and complement the iconic architectural elements of the city's Cultural District. The designs are clean and modern yet suggestive of the arches of the existing bridges on Lancaster Avenue and Main Street. The V-shaped pier design is slender, streamlined, and touches the landscape gently. The superstructure consists of trapezoidal concrete boxes with clean lines. The bridges enhance the sense of connection between Trinity Uptown and Fort Worth's most cherished cultural hubs and improve the image of the mostly industrial area adjacent to the new channel. The bridges are illuminated at night for enhanced pedestrian use at deck and below deck levels.



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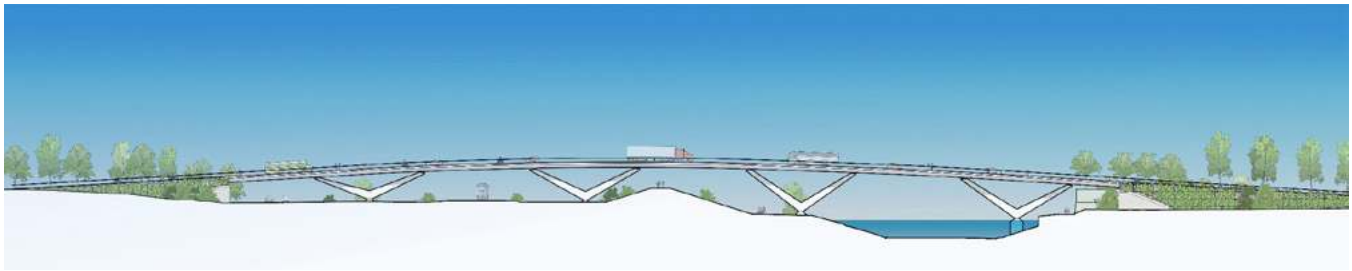
Bridge Details and Aesthetic Enhancements

- Well-proportioned, slender V-shaped piers that resemble open arms.
- Arched pedestrian railings with razor-thin cables for unobstructed views and overall transparency.
- Elegantly and carefully detailed bridge abutments with diagonal rustications.
- Light-colored structural elements highlight the bridge along the new riverfront.
- Bridge underside is uncluttered with stream line appearance.
- Use of illuminated wide sidewalks and bike lanes for improved connectivity.



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I-74 Mississippi River Bridge

Quad Cities, IA and IL

Type:	**Steel arches**
Services:	**Conceptual design** **Community participation** **Architectural visualizations** **Physical models**
Cost:	**$700 million**
Client:	**Iowa DOT** **800 Lincoln Way Ames** **Iowa, IA 50010**

A set of twin steel arches replaced a pair of existing suspension bridges that for decades had been symbols of the region. The impressive arches are higher than the previous suspension bridges and visible from long-range viewpoints. The new crossing has twin decks and a main arch span over the navigation channel. A pedestrian and bicycle trail is attached to the bridge creating a link between trails along the river shorelines. The bridge is illuminated at night acting like a beacon along the Mississippi and visible from the four cities surrounding the crossing. The height of the arches over the river makes them true landmarks along the Mississippi River and Quad Cities region.

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Bridge Details and Aesthetic Enhancements

- Twin steel basket-handle arches.
- Minimal structural bracing between arches for visual clarity and aesthetic appeal.
- Protected pedestrian and bicycle walkway along the entire bridge.
- Aesthetic lighting highlights the arches and approach spans.
- Elegantly and carefully detailed bridge arch abutments, cable anchors, and connections.
- Slender inclined arches mark river navigation channel.

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Throop Street Bridge

Chicago, IL

Type: **Truss arch**

Services: **Conceptual, preliminary, and final design**

Cost: **$32 million**

Client: **Sterling Bay and City of Chicago**
City Hall, 121 N LaSalle Street
Room 1000
Chicago, IL 60602

The new Throop Street Bridge will cross the Chicago River as part of the proposed Lincoln Yards plan to revitalize an old industrial district in the city of Chicago. The six-billion-dollar development plan will create twenty-one acres of open, publicly accessible space. The signature truss bridge will have a clear span over the navigable river. It also includes a separated cycle track that will improve bicycle connectivity in the area with a direct link to the 606 multiuse recreational trail. The height and prominence of the truss arch will become a signature component of the development and mark the crossing from a distance. The bridge type recalls other historic truss bridges over the Chicago River but with new state-of-the-art detailing and architectural enhancements. At night, the illuminated bridge will be a beacon for the community.

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Bridge Details and Aesthetic Enhancements

- Arch truss inspired by traditional steel bridges across the Chicago River.
- Well-proportioned structural arch truss superstructure with angled and slender elements.
- Integrated aesthetic lighting that highlights the arch.
- Carefully detailed bridge abutments with architectural rustications.
- Light-blue structural elements and matching railings that enhance the bridge from a distance.
- Monumental concrete abutments to visually terminate the end of arch trusses.

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Columbus Airport Bridges

Columbus, OH

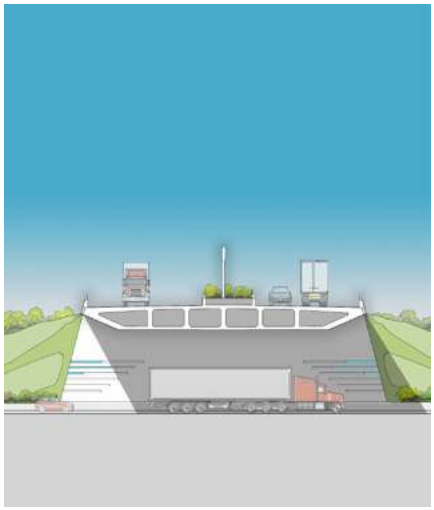
Type: **Post-tensioned cast-in-place frame**

Services: **Conceptual, preliminary, and final design**
Aesthetic lighting design

Cost: **$10.5 million**

Client: **Columbus Regional Airport Authority**
7250 Star Check Drive #100
Columbus, OH 43217

The John Glenn Columbus International Airport in Columbus, Ohio, needed a crossover taxiway so that aircraft could travel from the terminal building to the outer runways. The bridge is designed to carry a 747-400 aircraft weighing 894,900 pounds. A post-tensioned cast-in-place concrete structural system with integral abutments was selected. A hydronic deicing system consisting of tubes containing glycol from a pump and heater was embedded into the deck to keep it from icing during Ohio winters. Two additional narrower service bridges were also built following the same architectural language. A system of striking blue linear lights was integrated into the underside of the bridge and inclined abutments. The clear, elegant spans create a gateway into the airport with understated architecture and visual consistency.



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Bridges Details and Aesthetic Enhancements

- Family of visually consistent concrete bridges with a streamlined appearance.
- Inclined and tapered abutments with horizontal rustications.
- Distinct light-gray color for visual consistency.
- Aesthetic lighting enhances the bridge at night with blue linear lights integrated into the abutments and bridge deck underside.

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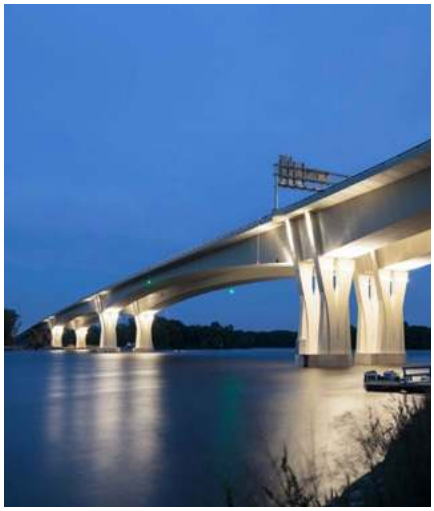
I-90 Dresbach Bridge

Dresbach, MN and La Crosse, WI

Type:	**Concrete segmental box**
Services:	**Conceptual and preliminary design**
Cost:	**$190 million**
Client:	**Minnesota DOT** **2900 48th Street NW** **Rochester, MN 55901**

The I-90 Dresbach Bridge spans the Mississippi River between Dresbach, Minnesota, and La Crosse, Wisconsin. The structure consists of a series of long-span concrete segmental boxes and sculpted concrete piers. The bridge is understated, elegant, and low profile to blend in with the sensitive surrounding landscape, which includes several scenic bluffs and protected wetlands near the river. The bridge is a new gateway between the two states that provides added capacity and safety while enhancing the river environment.



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Wasena Bridge

Roanoke, VA

Type:	**Concrete Y piers and box superstructure**
Services:	**Conceptual, preliminary, and final design** **Community participation** **Architectural visualizations** **Construction supervision**
Cost:	**$50 million**
Client:	**City of Roanoke** **Noel C. Taylor Municipal Building** **215 Church Avenue** **Roanoke, VA 24011**

The new Wasena Bridge will replace an aging fracture critical bridge in Roanoke, Virginia. The new bridge will include wider sidewalks, bicycle dedicated lanes, and a family of Y-shaped piers that will open views and improve recreational spaces under the bridge. This new elegant structure will fit in well with the natural context and cross over the Roanoke River and a series of railroad tracks. The slender concrete piers have distinct architectural treatments to emphasize their slenderness. The new signature crossing will also include aesthetic lighting, open railings, and overlooks to further integrate the bridge into the beautiful landscape and take advantage of views of the nearby mountain range.

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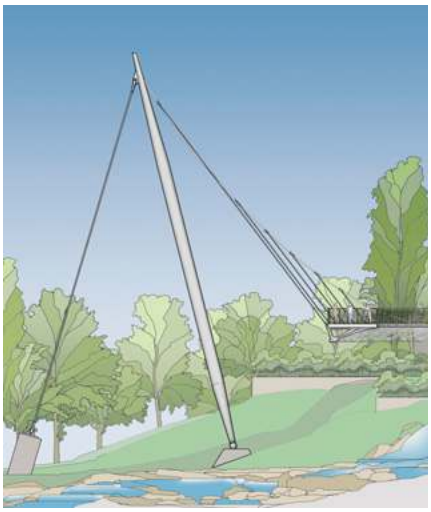
Liberty Bridge

Greenville, SC

Type:	**Curved suspension**
Services:	**Conceptual, preliminary, and final design** **Community participation** **Construction services**
Cost:	**$4.5 million**
Client:	**City of Greenville** **City Hall, 206 S Main Street** **Greenville, SC 29602**

Downtown Greenville is split by a wooded valley park that encompasses the Reedy River falls. The award-winning Liberty Bridge, which replaced a six-lane highway bridge that was demolished, is located just downstream from this group of waterfalls. The new bridge has a curved clear span over the river that arcs away from the falls providing visitors with an aerial platform from which to view the cascading water. The bridge gently slopes into the ravine and is supported by twin inclined towers and a single suspension cable, allowing for unobstructed views. With a clear span over the river, the bridge appears to float over the landscape. The twin towers and suspension cable are visible from vantage points throughout the city, drawing visitors to the public park, falls, and Reedy River.



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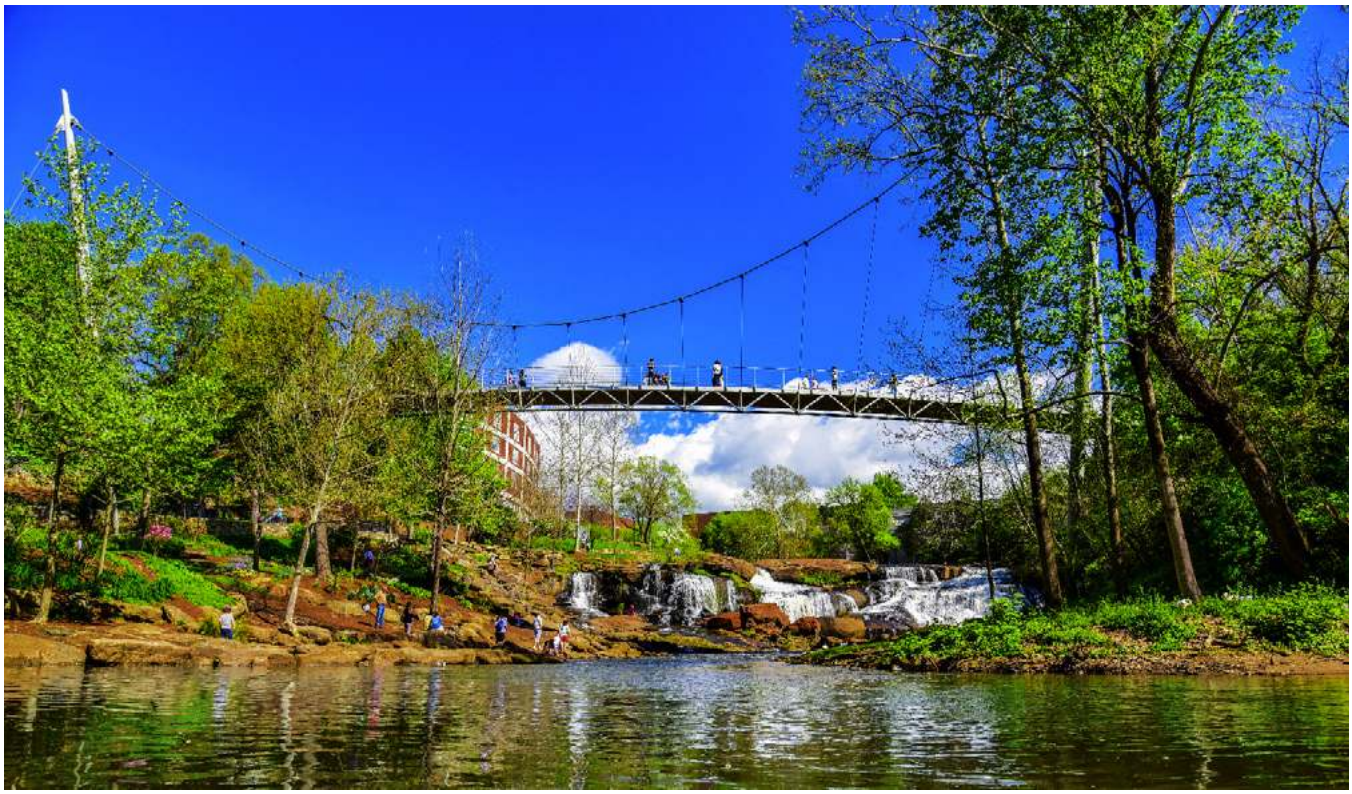
Bridge Details and Aesthetic Enhancements

- Slender pedestrian railings with razor-thin cables for unobstructed views and overall transparency.
- Well-proportioned, curved structural truss superstructure with angled and curved elements.
- Tapered, inclined steel towers with bottom sphere assemblies to allow for bridge flexibility and thermal movements.
- Integrated railing lighting and overall aesthetic lighting that highlights the towers and cables.
- Carefully detailed bridge abutments, cable anchors, and connections to enhance pedestrian experience.
- Light-colored structural elements to highlight the bridge within the park's context.



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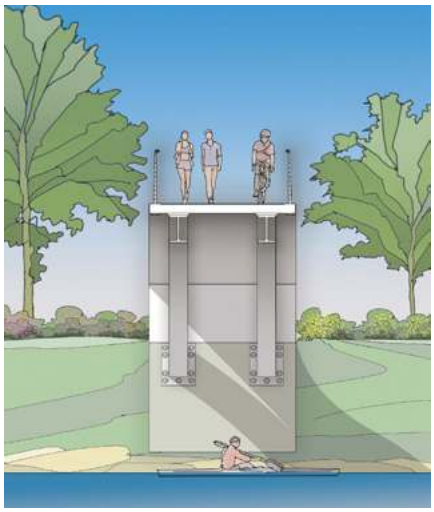
Tilley Bridge

Fort Worth, TX

Type:	**Steel arch/stress ribbon**
Services:	**Conceptual, preliminary, and final design** **Community participation** **Aesthetic lighting design** **Physical models**
Cost:	**$2.5 million**
Client:	**City of Fort Worth** **City Hall, Lower Level** **1000 Throckmorton Street** **Fort Worth, TX 76102**

The Phyllis J. Tilley Memorial Bridge crosses over the Trinity River connecting Trinity Park to a new trail that terminates in downtown Fort Worth. The bridge has a graceful profile that enhances the serene and beautiful landscape. A steel arch supports steel stress-ribbon segments and precast concrete planks over the river complementing the adjacent historic Lancaster Avenue vehicular bridge. The steel stress ribbon/arch combination was the first of its kind in North America. Pedestrians and bicyclists crossing the bridge experience a smooth, undulating ADA-compliant bridge surface. At night, the bridge is illuminated with a combination of white and blue LED lighting for increased safety and aesthetic appeal. This elegant, cost-effective bridge has become a visual asset along the Trinity River and a new symbol of the city of Fort Worth.



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Bridge Details and Aesthetic Enhancements

- Well-proportioned, slender steel arch and curved profile over the river.
- Slender pedestrian railings with razor-thin cables for unobstructed views and overall transparency.
- Elegantly and carefully detailed bridge abutments for both arch and stress ribbons, visually connected with an inclined wall.
- Well integrated ADA accessibility ramps which are not apparent on the facade of the bridge.
- Light-colored structural elements that highlight the bridge within the park's context along the riverfront.
- Visual compatibility with the existing historic bridge by introducing a matching arch profile.

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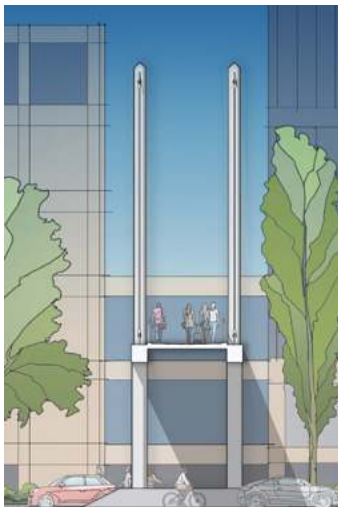
Moody Bridge

Austin, TX

Type:	**Inverted Fink truss**
Services:	**Conceptual and final design** **Aesthetic lighting design** **Construction services**
Cost:	**$3 million**
Client:	**University of Texas at Austin** **Moody College of Communication** **300 W Dean Keeton Street** **Austin, TX 78712**

The Moody Bridge is a one-of-a-kind inverted Fink truss pedestrian bridge in Austin, Texas. The bridge connects two buildings that are part of the Moody College of Communication at University of Texas. The bridge crosses over West Dean Keeton Street—a busy thoroughfare that traverses the campus. The bridge is characterized by a series of slender steel towers that vary in height and scale, creating an elegant statement along one of the major avenues surrounding the campus. This type of bridge is the first of its kind in the United States and the only one worldwide with a single support tower as the main loading member. Tall, slender towers mark the bridge crossing from a distance, creating a gateway to the university campus for students and visitors alike. The pedestrian bridge complements the architecture of the Bello Center, one of the recently completed buildings of the communication college. The bridge has integrated aesthetic lighting in the stainless steel railings.



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Bridge Details and Aesthetic Enhancements

- First inverted Fink truss bridge in the United States.
- Minimal number of support piers to allow unobstructed access to adjacent campus buildings.
- Efficient use of materials by sizing towers and rods to reflect the increasing loads toward the central tower foundation. Towers and rods are reduced in size and height when closer to the ends of the cantilevers.
- Main bridge foundation was built on a narrow street median that could not be widened.
- Innovative bridge illumination of walking surface and main superstructure.

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Appleton Bridge

Boston, MA

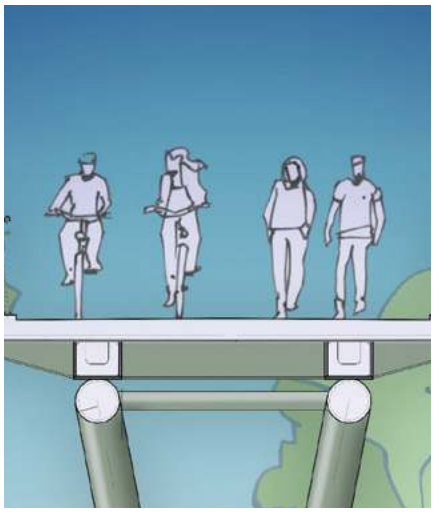
Type: **Steel arch**

Services: **Conceptual and preliminary design**
Architectural visualizations
Construction services

Cost: **$12.5 million**

Client: **MassDOT**
10 Park Plaza, Suite 4160
Boston, MA 02116

The Frances Appleton Pedestrian Bridge was part of the master plan to restore the iconic 1908 Longfellow Bridge across the Charles River between Boston and Cambridge. An obsolete pedestrian bridge next to the historic bridge was replaced with an ADA-compliant bridge that better complements the arches of the historic structure. This new deck arch has a contemporary look and is transparent to avoid obstructing views of the historic Longfellow Bridge, the river, and parkland. The slender main steel arch is one of the largest spans over Storrow Drive connecting to the Esplanade. The approach ramps follow a similar architectural language and appear to float over the landscape before landing next to the river. The crossing has become an iconic link from downtown Boston to the Esplanade and Charles River.



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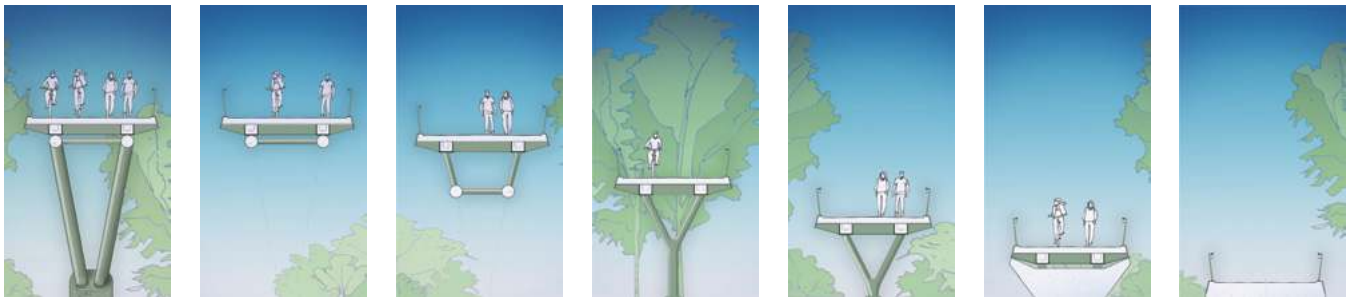
Bridge Details and Aesthetic Enhancements

- First accessible pedestrian/bicycle bridge over Storrow Drive, which connects Boston to its riverfront Esplanade.
- Elegant ADA accessible curved ramps and stairs.
- Use of steel castings to accommodate special detailing of Y-shaped piers to resemble tree branches.
- Use of dark green gray color that matches historic bridge and integrates into park.
- Use of lightweight concrete to help reduce pedestrian-induced vibrations and avoid dampers.
- Pedestrian bridge with the longest arch span in the Boston area.



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East 54th Street Bridge

New York, NY

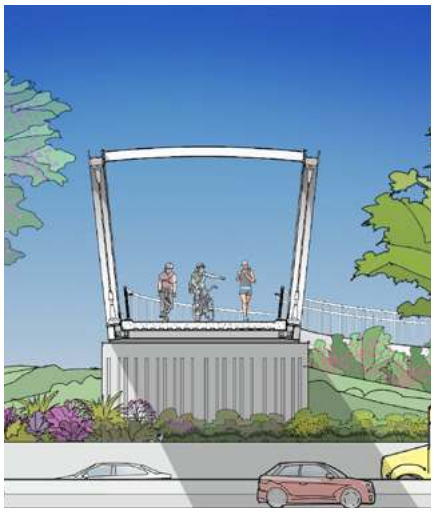
Type: **Steel tied arch**

Services: **Conceptual, preliminary, and final design**
Community participation
Construction services

Cost: **$22 million**

Client: **New York City Economic Development Corporation**
One Liberty Street
New York, NY 10006

The new pedestrian and bicycle bridge at East 54th Street in Midtown Manhattan consists of an elegant clear-span arch bridge over FDR Drive. The bridge connects the adjacent neighborhood to a new linear park on the East River. The bridge design features inclined arches and fencing for open views of the river and Roosevelt Island. All details were designed with a context-sensitive architectural theme and consistent, high-quality elements. The approach spans are ADA-accessible and follow a curvilinear alignment for visual appeal and interest. The new bridge has become a gateway structure along the East River and a source of pride for the community.



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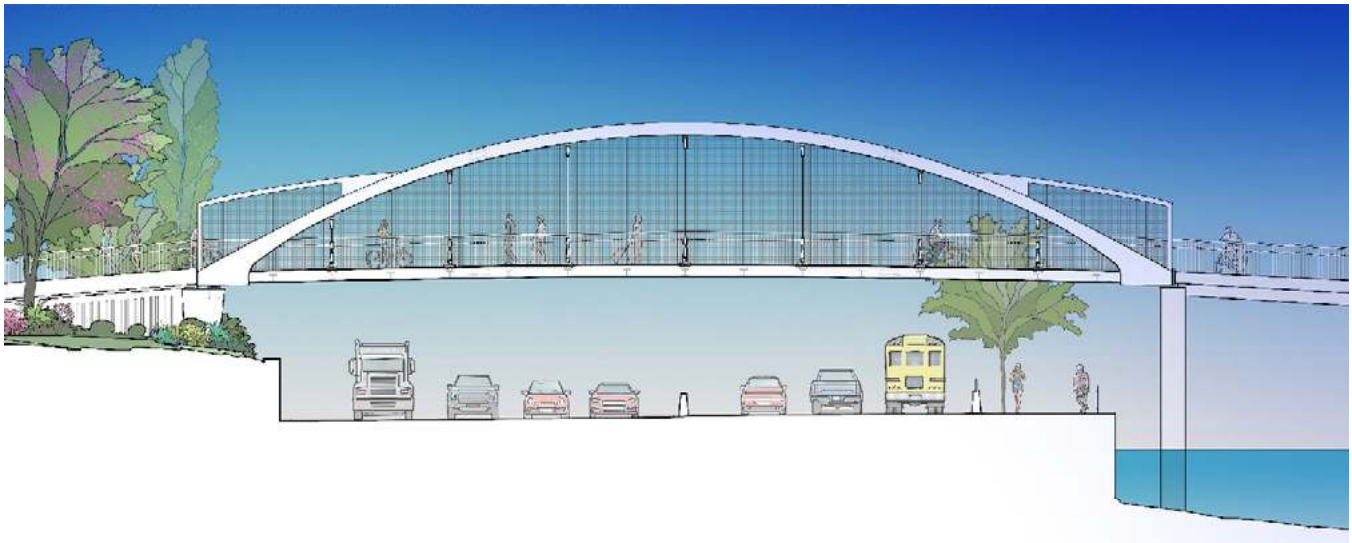
Bridge Details and Aesthetic Enhancements

- First tied-arch bridge over FDR Drive.
- Midcentury-inspired architectural features and articulation of safety railings to visually relate to the context and nearby architecture.
- Light-gray structural system complements the marine environment.
- Use of curved access ramps to enhance an adjacent park and provide full accessibility.
- Concrete retaining walls enhanced with vertical rustication and angled geometry relating to the main arch.



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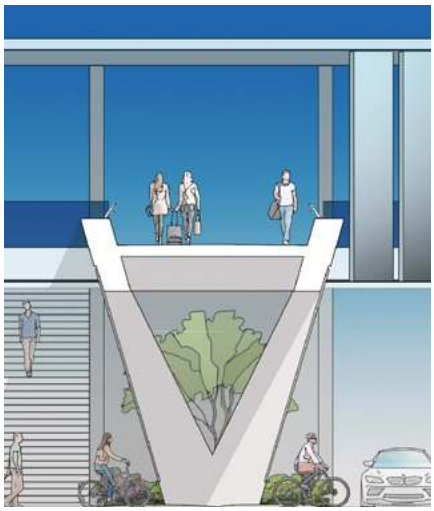
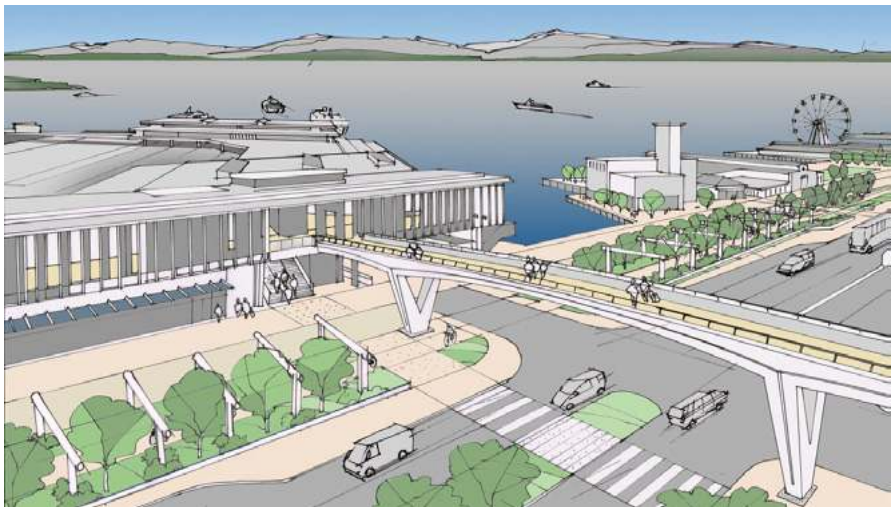
Marion Street Bridge

Seattle, WA

Type:	**Concrete box**
Services:	**Conceptual, preliminary, and final design** **Aesthetic lighting design** **Construction services**
Cost:	**$7 million**
Client:	**City of Seattle** **Seattle Municipal Tower** **700 5th Avenue** **Seattle, WA 98104**

The bridge connects downtown Seattle with the Colman Dock Ferry Terminal over a new promenade and reconfigured Alaskan Way. It replaced a narrow, unattractive pedestrian bridge. The new bridge acts as a gateway to the city along the improved waterfront with excellent views of Elliott Bay and beyond. The Marion Street Bridge includes a main span over the Alaskan Way and two balancing, long cantilevers that allowed the bridge to be built independently of the new ferry terminal and future buildings along the waterfront. The main reinforced concrete piers are sculptural, well proportioned, and illuminated at night.





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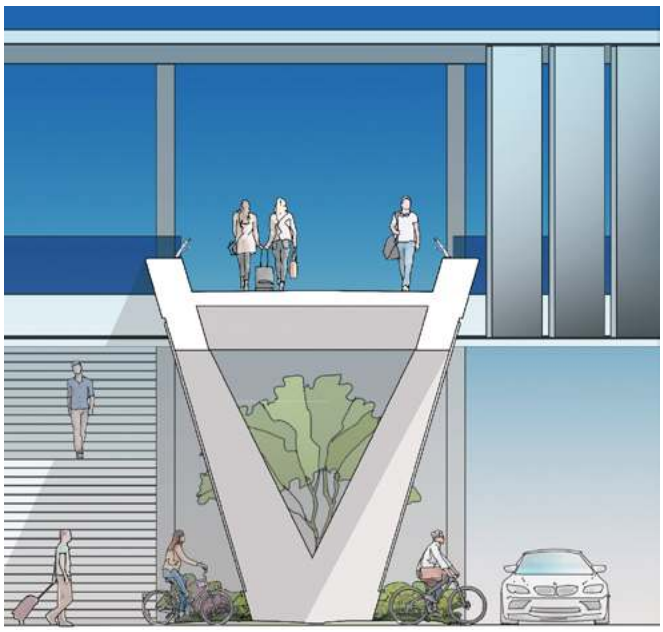
Bridge Details and Aesthetic Enhancements

- Tapered V-shaped sculptural concrete piers.
- Aesthetic lighting enhances the bridge at night by highlighting the bridge profile from a distance.
- Curved stainless steel railing details for visual appeal.
- Use of architectural rustications to improve bridge proportions and visual slenderness.
- Consistent light-gray color of all bridge components to unify the overall appearance.



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Northern Avenue Bridge

Boston, MA

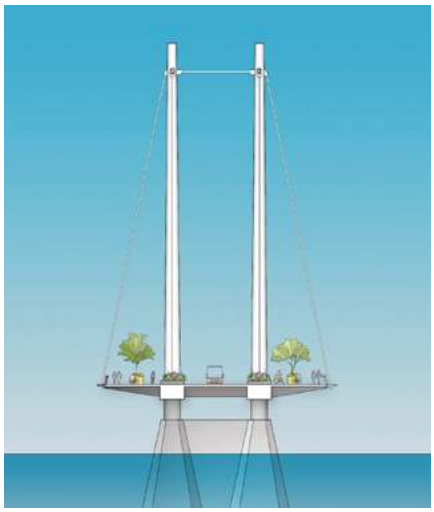
Type: **Suspension**

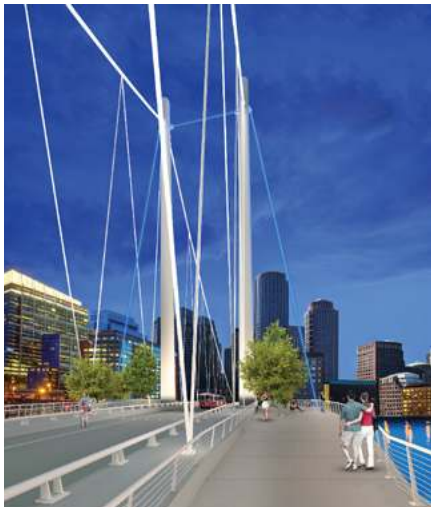
Services: **Conceptual design**

Cost: **$40 million**

Client: **City of Boston**
Public Works Department
One City Hall Square
Boston, MA 02201

The new Northern Avenue Bridge will replace a century-old truss movable bridge over Fort Point Channel. The new bridge will include wide sidewalks and bicycle tracks with beautiful views of the harbor. The design of the elegant suspension bridge and overall architecture is inspired by the marine environment and many sailboats on the water. The dramatic single tower suspension bridge will create a new gateway to the waterfront and a dramatic statement in the cityscape. The new bridge will also include curved overlooks and open space near the center navigation span with seating and landscaping for users to enjoy views of the harbor and the city. In addition, the bridge will also potentially carry emergency vehicles in the future. The bridge will be illuminated at night becoming a beacon in the city and a memorable waterfront asset.





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Bridge Details and Aesthetic Enhancements

- First single-tower contemporary suspension bridge in the region.
- Use of inclined stainless steel railings with horizontal cables to create open views of the waterfront.
- Tapered vertical steel towers inspired by the masts of traditional ships in the harbor.
- Catenary cable system that complements the marine environment.
- Aesthetic lighting enhances the bridge at night.

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