



A BRIDGING PLACE

CELEBRATING THE HISTORY & FUTURE OF CROSSING THE TRINITY RIVER

DALLAS POWER ART DESIGN COMPETITION | BRANDON W. SMITH & E. RAMON CAVAZOS III



Oncor West Levee Substation

A BRIDGING PLACE

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The history of the City of Dallas is inextricably tied to not just a specific place but an act, the act of crossing the Trinity River. The early act of fording the river resulted in a settlement; today we see a soaring arch-supported, cable-stayed bridge connecting two parts of a vibrant, social and progressive city. The idea for tomorrow is an installation that celebrates the act of crossing, or bridging, with landscaping, lighting and a dynamic structure that symbolizes the passage of time and the many threads that are woven into the city fabric of Dallas.

The installation is a screen wall, a sculpture, an overlook, a meeting place, a monument, a garden and a welcoming gesture. Five bands rise out of the earth and are twisted, pushed, and bent into an undulating form. One intermediate band forms a walkway providing not only an alternate route of traversing the corner but an overlook and elevated view of the Margaret Hunt Hill Bridge and skyline of Dallas.

The installation is a celebration and monument honoring the city's past and future. Each band evokes the crossing of the Trinity River, the act that has played such an important role in the history of Dallas with the topmost band echoing the newest bridge with its signature arch. The emphasis of the bridge is underscored by the act of bridging two disparate parts of the city, weaving together communities currently separated culturally and economically but now less physically. Much like the bands of the installation are woven together so too are the people of Dallas so that each constituent retains its own character but is dependent on the others for support and to create a unified identity - the monument symbolically translates these ideas into a physical form and serves as a communal meeting point, a place to reflect or to look out and a welcoming gesture to West Dallas.

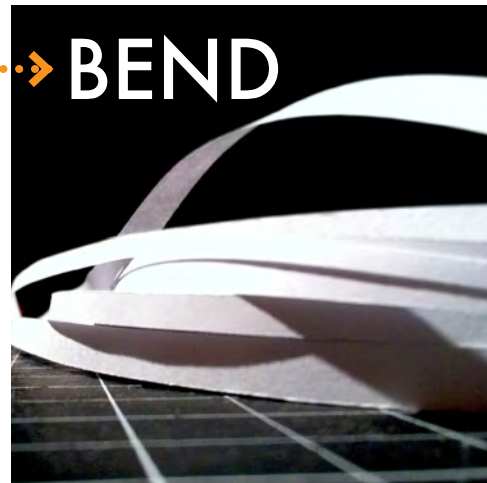
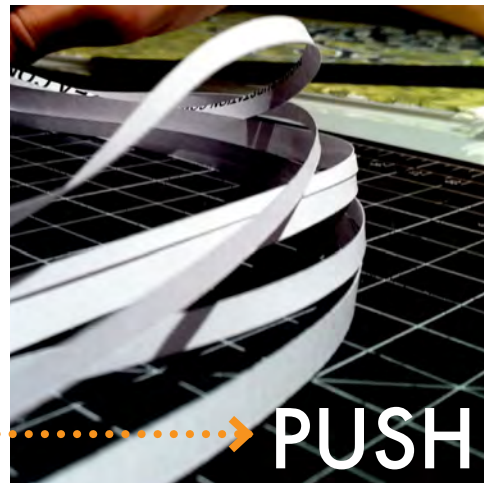
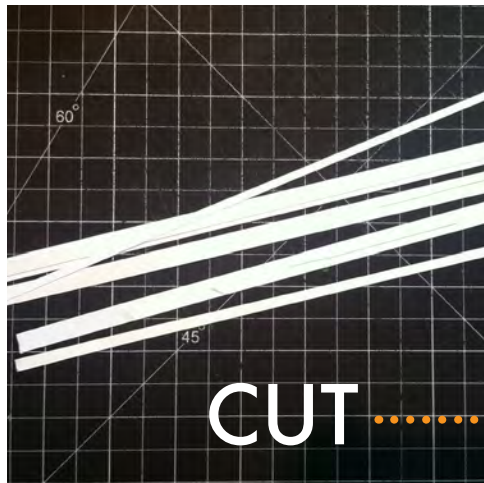


above: image courtesy of Santiago Calatrava, LLC

BRIDGE: (*noun*) a connecting, transitional, or intermediate route or phase between two adjacent elements, activities, conditions, or the like

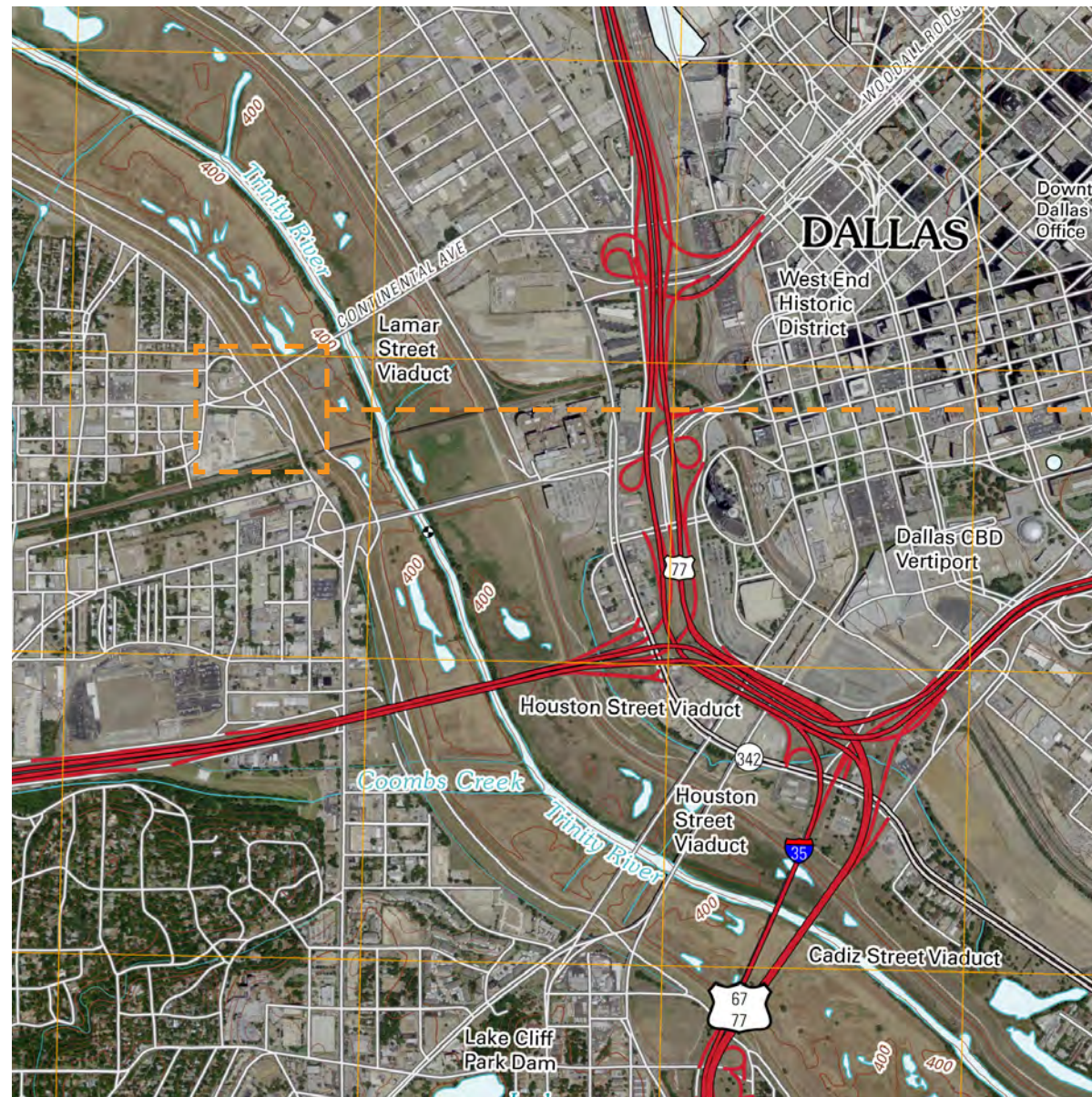
The proposal, "A Bridging Place," is meant to physically represent the idea of bridging while literally providing an intermediate route across the substation corner. The Margaret Hunt Hill Bridge is a flat plane suspended by the soaring arch and dynamic cables whereas the new installation imbues the plane with the arch and dynamic character creating a single, unique entity.

The manipulation of the plane is kept to four basic actions: cut, twist, push and bend. Alone each is powerful and leaves a "memory" on the plane - after each action it has been irrevocably changed. Together the actions form a seemingly complex yet graceful and striking structure. This is the beginning.



SITE PLAN

- UNITED STATES OF AMERICA
- +
- TEXAS
- +
- CITY OF DALLAS
- +
- TRINITY RIVER CORRIDOR
- +
- MARGARET HUNT HILL BRIDGE LANDING
- +
- ONCOR WEST LEVEE SUBSTATION
- +
- ENTRY TO WEST DALLAS



above : 2008 U.S. Geological Survey; right: site map courtesy of CityDesign Studio



OVERALL PLAN

MARGARET HUNT
HILL BRIDGE
LANDING

NEW SUBSTATION
ACCESS ROAD

INSTALLATION

ELEVATED
WALKWAY

WEST LEVEL
SUBSTATION

EXISTING
LANDSCAPE
BUFFER

EXISTING
SUBSTATION
ACCESS
(MAINTAINED)



PLAN 1



Primary landscape elements are located at the corner to provide additional buffer for the substation and for an attractive entry to West Dallas

PLAN 2



HARDWOOD WALKWAY



VITEX ANGUS-CASTUS



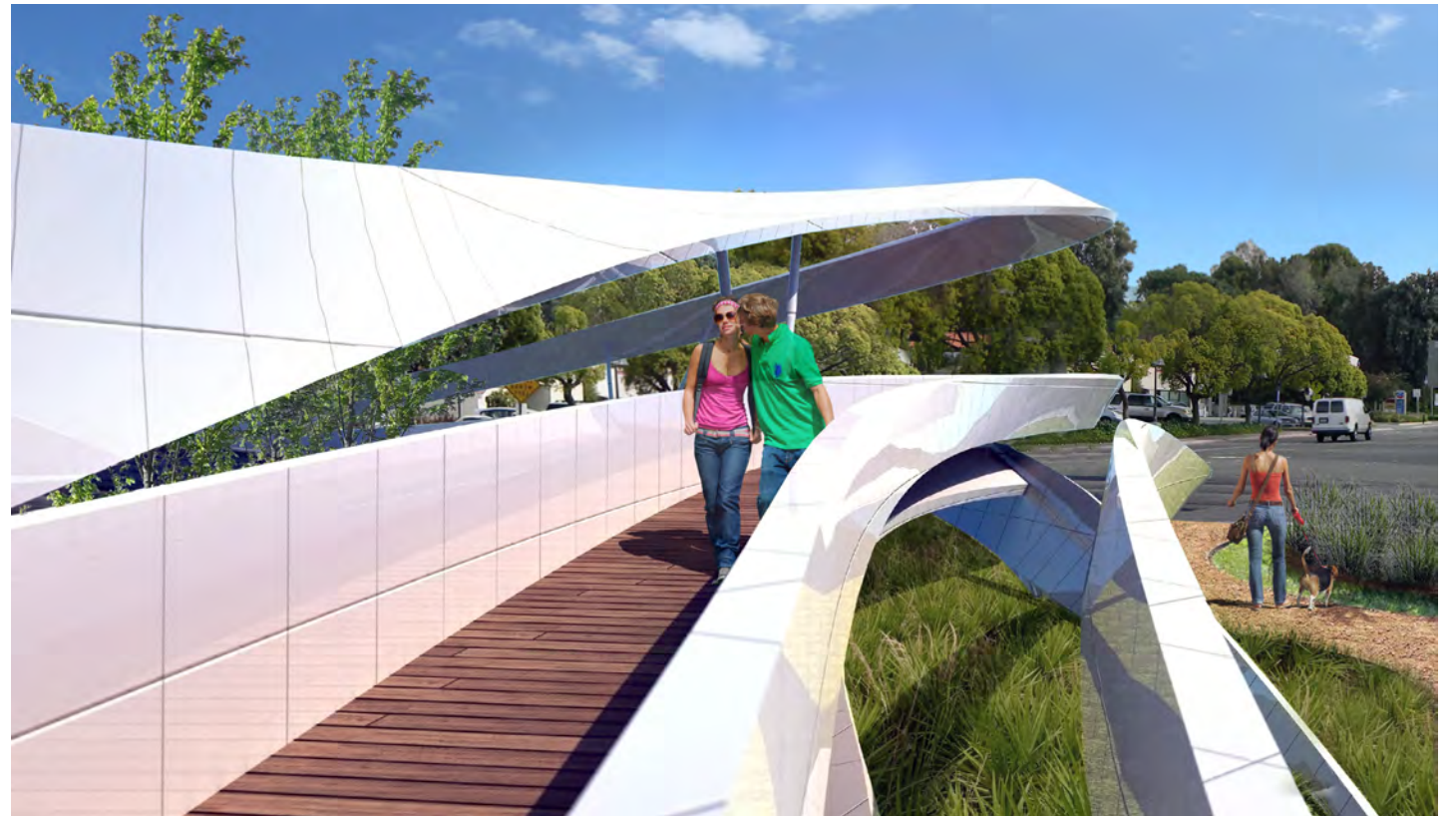
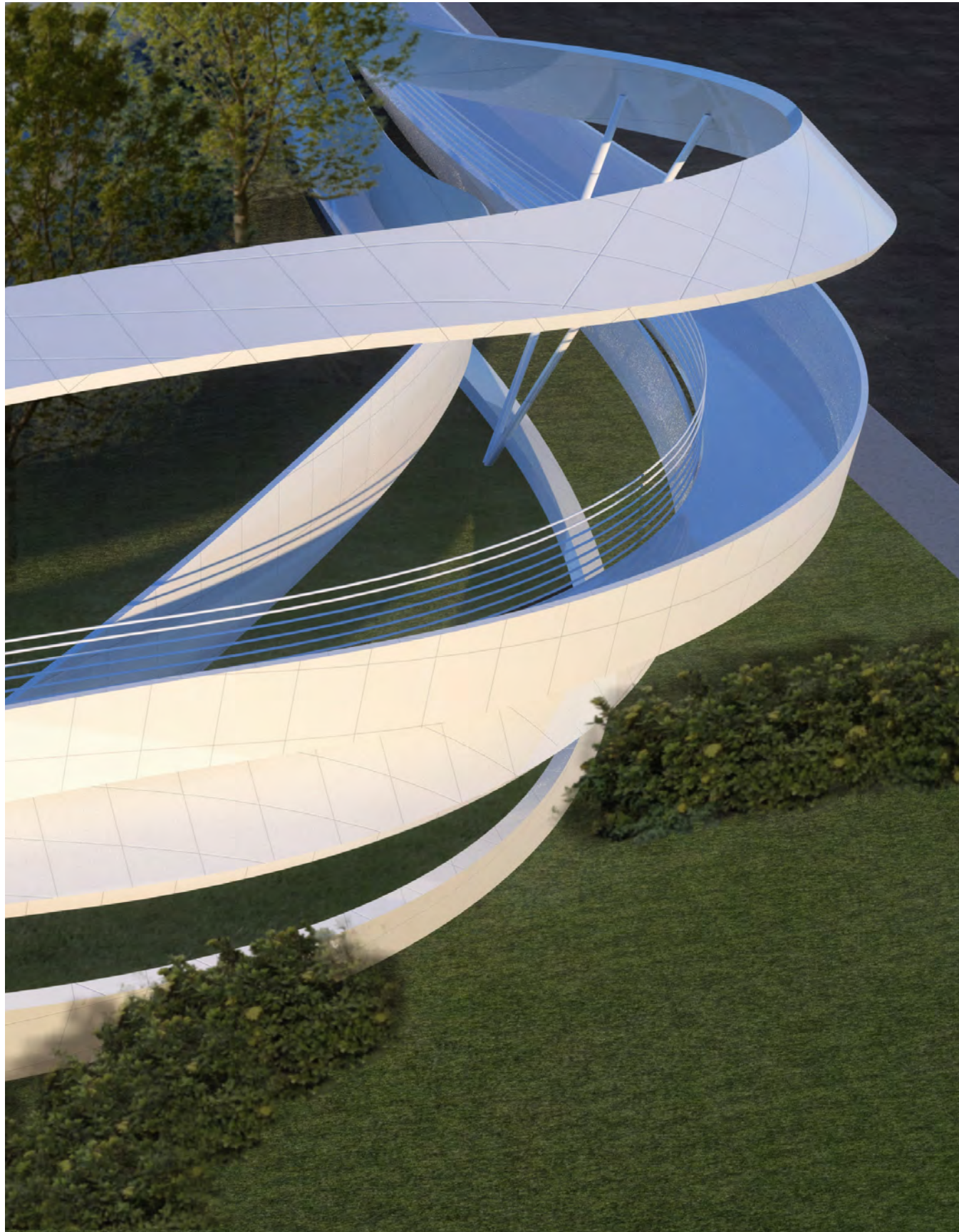
RIVER ROCK

Each band of the installation tapers down and appears to merge back into the earth. The walkway is joined to the adjacent sidewalk.





View from the intersection of Singleton Blvd and N Beckley Ave looking south



Birds-eye view at corner

Top: View of installation at night; below: View looking northeast from the elevated walkway

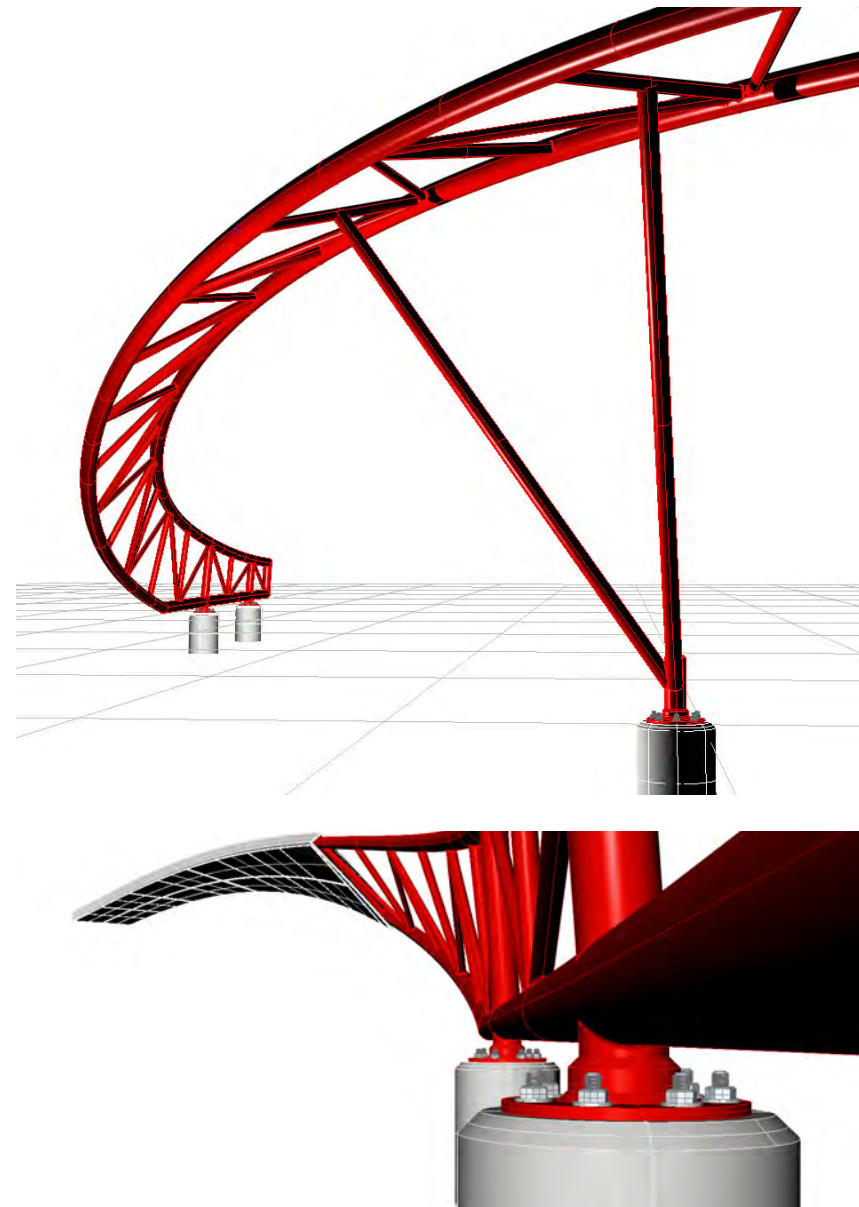


View looking east towards Downtown Dallas from Singleton Blvd where the walkway meets the sidewalk

STRUCTURE & PHASING

The primary structural support for the installation is contained within each band and is fabricated of welded structural steel. The majority of the installation is self-supporting; however, the upper band is supplemented with pairs of angled columns at the longest free-span area. Aside from the columns the primary structural elements are hidden from view giving the illusion that each band is much lighter and rises up and away from the ground with ease. The loads are transferred from the structural steel to a series of shallow footings and several drilled piers. Each band is engineered and optimized to rest on just a few points to minimize the amount of below-grade structural support work.

Phasing of the work relies on the fact that the majority of the installation can be fabricated off site and minimal equipment and manpower is required for erection. The first phase of the project consists of pouring the footings and piers, grading, utility installation and landscaping. Simultaneously (or at a later date) the steel and metal panels are fabricated and brought to the site to be installed in large sections with little disturbance to the existing work. Finally, lighting, decorative landscaping and any finishing work are completed for a finished installation.



top: upper band support; bottom: typical support



above: site plan showing first phase - below-grade support is complete and site is landscaped

COST ESTIMATES

PHASE I

SITE LAYOUT AND MOBILIZATION Prepping site for construction and surveying	\$20,000
PIERS & FOOTINGS Drilling, excavation and pouring	\$40,000
SITE UTILITIES Connecting to existing plumbing and storm sewer. Running electrical below grade	\$45,000

LANDSCAPE AS FOLLOWS

SITE PREPARATION. Grading, cleaning, and contouring of the site prior to installation of the gardens. Installation and cultivation of soils and soil amendments to promote adequate health and vigor of all plantings; furnish and install steel edging where applicable to separate vegetated landscape beds, turf, and native grass segments. Mulching of plantings following installation.	\$45,000
HARDSCAPE. Furnish and install approximately 3,000 s.f. of decomposed granite, gravel, river stones, or other equivalent material. Furnish and install any necessary underlayment materials to prevent settling	\$11,000
IRRIGATION. Furnish and install low-volume emitting irrigation system throughout the entire site as outlined by the USGBC	\$40,500
SHADE & ORNAMENTAL TREES. Furnish and install approximately 12 shade trees to a height of 15-20 feet. Furnish and install approximately 25 ornamental trees to a height of 10-12 feet.	\$43,000

LANDSCAPE (continued)

SHRUBBERY & ORNAMENTAL VEGETATION. Furnish and install approximately 400 3-gallon units of sustainable, native shrubbery	\$12,000
GRASS & GROUNDCOVER. Furnish and install approximately 8,000 1-gallon units of native grasses and/or sustainable groundcover(s). Furnish and install approximately 8,000 s.f. of buffalo grass sod.	\$65,000
PHASE I SUBTOTAL	\$321,500

PHASE II

PRIMARY SCULPTURAL ELEMENT Includes engineering, fabrication and installation of both the structural steel as well as finish metal panels for the entire structure.	\$7,500,000
ACCENT LIGHTING Furnish and install lighting for each level of structure	\$200,000
PHASE II SUBTOTAL	\$7,700,000

PROJECT TOTAL **\$8,021,500**

NOTE: Costs should be considered general order-of-magnitude based on the best available information of the project at this point in time. Actual costs may vary as the design develops and materials are selected.

ANNUAL MAINTENANCE COSTS

LANDSCAPE MAINTENANCE Pruning of vegetation, select replacement of vegetation as necessary general upkeep	\$1,000/MO
IRRIGATION	\$5,000/YR
GENERAL MAINTENANCE Includes twice annual power wash and repair of any constructed elements.	\$10,000/YR

PROJECTED YEARLY MAINTENANCE COST **\$27,000**

The estimates provided here are possible thanks to the contributions of the following companies:

Landscaping:
Unique Creations
Contact: Matthew Murrey, President
Ph: 214.893.7577
Unique Creations is a Dallas firm specializing in fine gardens and custom landscapes for some of the most elite residences in Dallas and surrounding areas.

Sculptural Installation:
Custom Metal Fabricators Inc.
Contact: Dave Duclett, President
Ph: 714.637.2409
Custom Metal Fabricators Inc. is a specialty contractor based in Orange, CA and has worked on many high profile projects including the Disney Concert Hall in Los Angeles and BP Millennium Bridge in Chicago both by Frank Gehry.

SUMMARY

“A Bridging Place” goes beyond merely trying to screen the West Levee Substation (an impossible task); the point is not to block or simply ignore the substation but instead to create a meaningful and community oriented place that is carved out by the substation and the street. This slice of land is already thrust to the forefront by the Margaret Hunt Hill Bridge and can be activated with an attractive and dynamic installation like “A Bridging Place.” Then the site is no longer a buffer but a destination in its own right, a place to take in and appreciate the bridges – the physical ones that cross the Trinity River and the ones that span the gaps and unite the communities that are the City of Dallas.

A special thank you to the City of Dallas, CityDesign Studio, Oncor and the National Endowment for the Arts Mayors’ Institute on City Design 25th Anniversary Initiative for making this competition possible and bringing the issue of sustainable and livable communities to a heightened public awareness. As fellow residents of the City of Dallas we look forward to the future development of the city and breathing new life into the city in and around the Trinity River Corridor.

About the Designers:

Brandon W. Smith is a designer based in Dallas, TX. A native of Brownwood, Texas Brandon moved to the Dallas/Ft. Worth area for his Bachelor of Science in Architecture (2006) and Master of Architecture (2010) both from the University of Texas in Arlington. While in Dallas Brandon has worked independently and with Evergreen Architectural Group on a variety of project types ranging from hospitality, commercial, multifamily residential and interior design.

E. Ramon Cavazos III is a registered Architect based in Dallas, TX. Ramon is a native of Grand Prairie, Texas with a Bachelor of Science in Art & Design, Architectural Design from the Massachusetts Institute of Technology (2005) and a Master of Architecture (2010) from the University of Texas in Arlington. Ramon currently works at HKS, Inc. where he has been involved on a variety of project types including hospitality, multi-family residential, aviation and healthcare.

An extension of having worked together while at the University of Texas at Arlington, Brandon and Ramon continue to collaborate on independent projects under the moniker **y₀** [design studio] (pronounced *why naught*). The pair’s design philosophy is rooted in an analogy to mathematics where there is an initial value or function that follows an iterative process that leads to one (of possibly many) solution based on the parameters or conditions set forth. Likewise a concept is a point of origin and the final design is a single *optimized* outcome determined by the site, context, culture, program and budget among many other constraints.



Downtown Dallas as seen from the Belmont Hotel shared via [wikipedia.org/wiki/Dallas_TX](https://www.wikipedia.org/wiki/Dallas_TX)



City of Dallas



**NATIONAL
ENDOWMENT
FOR THE ARTS**



