Architectural Foundation of San Francisco Forty-Fourth Annual High School Design Competition 2013

ARCHITECTURAL FOUNDATION OF SAN FRANCISCO 2013 FORTY-FOURTH ANNUAL HIGH SCHOOL DESIGN COMPETITION

Dear High School Student and Educator,

We are pleased to invite you to participate in the Architectural Foundation of San Francisco's Forty-Fourth Annual High School Design Competition. This is an exciting competition where high school students put their design skills, creativity, spatial and analytical thinking, and craftsmanship to the test. With the guidance of instructors, high school students design a building and communicate their design solutions through drawings and models. All high school students in both public and private schools in the greater San Francisco Bay Area are encouraged to participate. As a new component to this year's competition, high school students from across the world will also be able to submit their designs in a special Autodesk Revit-only category. Broadening the reach of the competition will enable many other young thinkers to participate in what is a very unique learning project.

The Architectural Foundation of San Francisco is a nonprofit educational organization that involves San Francisco students in a mentored appreciation of architecture, engineering, construction and the design process. San Francisco reigns as one of the most architecturally significant and beautiful cities in the world. The environment of architectural diversity is extremely important to the vitality of this great city. Everywhere, the vibrant and complex layering of landscape, color, cultures and light produces experiences that unexpectedly reveal themselves. Since its inception in 1990, the Architectural Foundation of San Francisco has endeavored to reach out to the general public to establish an open dialog on the architectural future of this community.

For more information about the Architectural Foundation of San Francisco & to receive competition updates, visit the website at <u>www.afsf.org</u> or email Will Fowler at <u>will@afsf.org</u>.

Thank you for your interest and we look forward to seeing your designs!

Sincerely,

Alan Sandler Executive Director, AFSF

Will Fowler Programs Director, AFSF

Ryan Lee Woods Bagot, Chair & Author



ARCHITECTURAL FOUNDATION OF SAN FRANCISCO 2013 FORTY-FOURTH ANNUAL HIGH SCHOOL DESIGN COMPETITION

COMPETITION SUMMARY

PROGRAM: ARCHITECTURAL DESIGN COMPETITION SPONSORED BY THE ARCHITECTURAL FOUNDATION OF SAN FRANCISCO

- DESIGN CHALLENGE: "HEALTHY OCEAN PAVILION"
- ELIGIBILITY: OPEN TO ALL HIGH SCHOOL STUDENTS OF THE GREATER SAN FRANCISCO BAY AREA AS WELL AS HIGH SCHOOL STUDENTS WORLDWIDE THROUGH A SEPARATE ONLINE SUBMISSION CATEGORY.

EDUCATIONAL

- OBJECTIVES:
 INCREASE YOUR AWARENESS OF THE RELATIONSHIPS BETWEEN SPACE, HUMAN SCALE & FUNCTION.

 GAIN EXPERIENCE IN COMMUNICATING YOUR PLANNING & DESIGNING IDEAS THROUGH DRAWINGS & MODELS.

 GAIN EXPERIENCE IN RECOGNIZING THE VARIED PROBLEMS IN PLANNING AND DESIGNING FUNCTIONAL SPACES FOR DEFINED USES.

 CREATE AN UNDERSTANDING AROUND THE PROBLEMS FACING THE OCEAN IN HOPES OF INSPIRING CRITICAL THINKING THROUGH UNIQUE DESIGN SOLUTIONS.
- COSTS: NO ENTRY FEE & NO PREREGISTRATION REQUIRED
- AWARDS: THIS IS A JUDGED COMPETITION WITH MONETARY AWARDS
- SCHEDULE: JANUARY 22, 2013 I COMPETITION DISTRIBUTION FEBRUARY 23, 2013 I AMERICA'S CUP EVENT AUTHORITY PRESENTATION & AUTODESK REVIT TRAINING APRIL 27, 2013 I COMPETITION ENTRIES DUE APRIL 28, 2013 I AWARDS CEREMONY & RECEPTION
- CONTACT: WILL FOWLER I PROGRAMS DIRECTOR I ARCHITECTURAL FOUNDATION OF SAN FRANCISCO 415.393.9963 I <u>WILL@AFSF.ORG</u> RYAN LEE I COMPETITION COMMITTEE CHAIR & AUTHOR I WOODS BAGOT 415.277.3041 I <u>RYAN.LEE@WOODSBAGOT.COM</u>



BRIEF:

You are challenged to design a temporary structure – an educational pavilion to support the America's Cup **Healthy Ocean Project**.

For the third consecutive year, the competition will follow a theme based on the America's Cup race. The 34th America's Cup, one of the oldest and best-known international sailing yacht competitions, will be coming to San Francisco in September 2013. The America's Cup was named after the schooner America, of the New York Yacht Club, which beat a fleet of British yachts in a race around the Isle of Wight in 1851. It symbolized a great victory for the new world over the old, a triumph that unseated Great Britain as the world's undisputed maritime power. The history and prestige associated with the America's Cup attracts not only the world's top sailors and yacht designers but an international audience as well.

The America's Cup, billed as more than just a race, is committed to delivering a model sustainable sporting event and to leave a positive legacy in the local community on the sport of sailing. The Event Authority's goal is to present the public with a series of events designed to deliver a positive message and to raise environmental awareness.

The Healthy Ocean Pavilion will serve the public's desire to learn about the need for healthy oceans, to work on healthy ocean projects and to promote awareness of the current activities sponsored by the America's Cup Event Authority in this area. You are charged with designing the temporary structure that will serve as an educational pavilion for the duration of the America's Cup competition, after which the structure will be dismantled and removed from the site so as to leave no carbon footprint of the building behind. The structure needs to not only be temporary, but self-sustaining and constructed from sustainable materials. Students are encouraged to consider alternative uses for their pavilion designs after the America's Cup concludes, either as a whole building relocated to another site for a different need or as an assemblage of materials used towards another purpose.

This pavilion will serve as a combination exhibition space and classroom for the general public, showcasing the connection between environmental awareness and the ocean. Your design solution should also consider the surrounding waterfront and architecture as well as have its own unique architectural presence on the site. You may consider but are not limited to any of the following solutions for your pavilion design: modular/prefabricated, mobile or stationary, or portable architecture. Since the pavilion is to be constructued with a limited life span, you may choose to design a single structure as a whole or a cluster of several building components throughout the site that link the program. Overall, your design solution should be creative and inspiring and foster the goals laid out in this design challenge.











SITE:

The building will be sited on the northern edge of San Francisco along the Marina Green. Placed adjacent to prime viewing opportunities for the America's Cup, the Marina Green Triangle site at 200 Marina Boulevard is situated between the Presidio to the west, Fort Mason Center to the east and the San Francisco Bay to the north. The San Francisco Bay Trail borders the site along its eastern and northern edges and is frequented by numerous pedestrians, runners and cyclers year-round. The proposed site offers direct access to many of the America's Cup events and showcases stunning views of San Francisco and the Golden Gate Bridge. Access to the site consists of a combination between walking, cycling, public transportation and private vehicles. Public parking is available close to the site along the Marina Green and at the Fort Mason Center. Private docks border the site to the north and east, providing an alternative means to directly access the site.

You are given a triangular site that is roughly 250' along the northern edge, 200' along the eastern edge and 300' along the diagonal adjacent to Marina Boulevard. Your pavilion design and its greater site planning configuration may be of any shape and may fill the entire site or any portion thereof. You may place your building design anywhere within the confines of the site. Your design for the site and how your building interacts directly with its surroundings will be shown on your site plan drawing. The entire site does not need to be built in your model.

SUSTAINABILITY:

A fundamental goal of this building is to embrace sustainability. In order to reduce the overall impact of the building on the natural environment, this pavilion should consider integrating innovative green building strategies that help increase energy and water efficiency, use renewable energy and materials, and reduce consumption, pollution, and waste. The building should consider careful building orientation, natural day lighting, smart shading systems, water conservation, and photovoltaic solar collectors among other strategies. Where possible, the building and site should showcase green building methods used to educate the public on sustainable architecture. Research into the US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system is encouraged.

PROGRAM REQUIREMENTS:

The Healthy Ocean Project Pavilion should either be a one or two story structure so as to minimize its presence along the waterfront. There is no predetermined building height limit, however the surrounding existing architecture and views should be considered when designing the height of your design. The building can be situated anywhere on the given site and in any orientation relative to true north, but in an effort to maintain light, air, views, open space and to minimize the footprint, the building itself must fit within an 80 feet by 160 feet rectangular plot. The pavilion will include the following spaces. Additional spaces may be added at your discretion; however it must add value to the building program and be in line with the pavilion's mission.

BUILDING PROGRAM: Your building design must include spaces for the following uses:

- Main Entrance & Lobby: (300 sq. ft.) This will serve as the gateway into the building from the exterior and must be easily visible to the public. The lobby includes a large digital display wall that will announce upcoming exhibitions, events, and classes occurring within the pavilion. There will also be a small information desk for two staff members to greet and assist visitors.
- Exhibition Space: [1400 sq. ft.] This space will house exhibitions relating to the Healthy Ocean Project mission and the America's Cup event. It may be used for event gatherings as well. This space should be flexible for many uses and should have the ability to be broken up into multiple smaller exhibition spaces. It should have an abundance of natural light. This space should be in close proximity to the Lobby and vertical circulation if applicable. The exhibition space should have high ceilings and can extend to an additional level.
- Lecture Hall/Workshop Rooms: [700 sq. ft.] This small lecture hall will provide a learning space for lectures and film screenings as well as a meeting point for Healthy Ocean volunteer programs. A small, elevated stage should be provided for instructors and demonstrations. This room should be able to seat at least thirty people. Seat arrangement can be furniture seating or integrated into the building's architecture. The space should also be able to be broken up into two spaces of equal size so that smaller workshops may be held simultaneously at times. The lecture hall may open up into the exhibition space for larger events as well as to the exterior.



- Kitchen Classroom: (600 sq. ft.) Part of the Healthy Oceans Project is to educate the public and increase awareness about what sustainable seafood means and where to find it. Not
 only will people be able to learn about sustainable food, but they will also be encouraged to take culinary classes and learn easy methods of preparing the food. This space should be
 able to accommodate a fully equipped kitchen and enough work space for a class of 10 people.
- Cafe: (500 sq. ft.) This space will provide visitors to the pavilion with a casual place to grab a coffee or drink and to have a snack. Seating for the cafe can be accommodated both within the interior of the building and/or along the exterior as well.
- Food Prep (250 sq. ft.) This space will provide back of house support for the cafe as well as for catered events that may occur in the larger exhibition space.
- Administrative Offices: (250 sq. ft.) This space is used for the day-to-day operations of the pavilion, including event and exhibit preparation and building maintenance. Space should be allocated for a Director's office and work space for at least two support personnel.
- Restroom: (300 sq. ft.) Provide one ADA compliant restroom for each gender. Each restroom will be 150 sq. ft. and will have two stalls and one sink.
- Storage: (100 sq. ft.) This is storage for the entire building and will include janitorial supplies, office supplies and furniture storage.
- Bicycle Storage: (100 sq. ft.): Visitors will be encouraged to bike to the pavilion and should have sufficient space to lock up their bicycles while roaming the building. Accommodation
 for up to ten bicycles should be factored in to the design.
- Circulation: (no predetermined area) This building circulation includes stairs, elevator and adjacent lobbies, and corridors. If your design is two stories, the elevator must have a minimum clear inside dimension of 5'-8" wide x 4'-6" deep. The stair must be at least 5'-0" wide.
- Roof Deck: (no predetermined area) The roof should be utilized to its maximum potential. It not only serves as one of the prime viewing locations during the America's Cup races, but on a typical day, visitors should be able to sit, linger, have lunch, and enjoy the views of the San Francisco Bay. This roof should be an architectural feature of the building and is a prime area to implement sustainable technologies such as solar, wind and water catchments.

<u>SITE PROGRAM</u>: Your site design must address the following uses:

- Site Amenities: Amenities that must be included on the site are seating, additional bike racks and shaded areas.
- Food Garden: An on site garden will provide a communal place to farm small crops of vegetables and fruits. Food that is grown in this garden will be incorporated into the sustainable cooking workshops. The garden will be the only lasting remnant of the pavilion once the America's Cup concludes and should be placed in an area that will enable other elements to be constructed in partner with it in the future.
- Outdoor Event Space: An outdoor event space should be located on the site. Activities in this space may include exterior exhibition space, small public gatherings, outdoor yoga or tai chi, and private parties. At the time of the America's Cup race, a large video screen will be positioned in this outdoor space to provide a live feed of the race just beyond the site. You are encouraged to plan for this by considering extra outdoor seating opportunities in addition to general seating.



1. DRAWINGS I Provide the following presentation drawings:

- Floor plan(s) of building 1/4" = 1'-0" scale I include furniture, room names, and north arrow.
- One elevation of building $1^{1}/4^{2} = 1^{2}$ -O" scale I Elevation view that best describes your design. Include a person for scale.
- One building section of building 1/4" = 1'-0" scale I Section view that best describes your design. Include a person for scale.
- One site plan $11/16^{\circ} = 1^{\circ}-0^{\circ}$ scale I include the building and surrounding site. Label all site elements and include a north arrow.

Drawings must clearly communicate the design solution through selection of appropriate drawing views, clarity of line work, and thoughtful layout and mounting of drawings onto board(s). Each drawing must be labeled with the drawing name (i.e. First Floor Plan, West Elevation) and the scale of the drawing. Rendering materiality and casting shadows is encouraged. Providing drawings at a smaller scale of drawings is acceptable only when the design scheme does not fit on the boards. Providing additional drawings beyond those described above is allowed. Presented drawings must be mounted on rigid 32"x 40" boards, mounted VERTICALLY (32" length side at the top and bottom of the board). A minimum of (1) board and a maximum of (2) boards are allowed. Drawings may be in ink, pencil or both. Hand-generated or CADD drawings are acceptable. Use of color is NOT permissible. Drawings can only be black, white and shades of grey.

2. MODEL

• Build one physical presentation architectural model of your building design at 1/4" = 1'-0" scale.

Models can be made of any materials, including foam core, museum board, card board and found objects. Models can only be black, white and shades of grey. Use of any color is NOT permissible. The direction of North must be noted on the model. The base of the model must be a square or rectangular. The base size must be 20" in one direction and between 20"-40" in the other direction. Longer models may be separated into (2) sections if needed. The entire triangluar site does not need to be built in the model.

3. **DESIGN DESCRIPTION I** Provide the following design description:

- Design Solution Title I Give a title to your design that best describes your design solution and strategy. (i.e. "Bird Perch", "Sea Sails", "The Wave", etc...)
- Design Narrative I Compose a thoughtful and concise description of your design solution and strategy. This may include your design inspiration and what you are trying to achieve
 with your design. You should be able to clearly articulate the temporary aspects of your design and how you intend to recycle your building at the conclusion of the America's Cup.
 Narrative should be no more than (8) eight sentences and should be typed or neatly hand printed and mounted on the front side of the presentation drawing board along with the
 drawings.

4. COMPUTER PERSPECTIVE RENDERINGS I This is an optional submission and is judged separately from the other award categories.

Provide three (3) 3D computer generated perspective renderings of your building design. Two of the renderings must be exterior views and one of the renderings must be an interior view. These are the best views describing your design solution.

3D computer generated renderings must be produced using Autodesk software (Revit Architecture, AutoCAD or 3ds Max). Submission requirements include one color print of each of the required views (3 total) on 11"x17" size paper and one CD containing the digital files in high resolution JPEG format of your renderings. Label the back of the prints and the CD with entrant's name, school and software used.

Submissions in this optional category by local Bay Area high school students will be entered in a separate judging category for Autodesk Revit entries. If you would like to also enter your design in to the international portion of the competition, please follow the online instructions posted to <u>www.afsf.org</u>

5. GENERAL GUIDELINES

Entrant's name and school must be written on the BACK of the drawings board and the BOTTOM of the model base. No names or identifying marks shall be placed on the front face of any drawing or model. Student must ensure that their entry fits within the presentation requirements. Any deviation from these presentation requirements including smaller or larger sized drawing or model boards, board orientation, or missing requirements may disqualify the entrant from that portion of the competition. Disqualifications of non-conforming entries are at the judges' discretion.





PRESENTATION DRAWING BOARD

MODEL



OPTIONAL 3D COMPUTER GENERATED PERSPECTIVE RENDERINGS



1. BEST DESIGN I Awards for overall superiority in design solution, model, and graphic presentation:

- 1st Place I \$200.00 & CCA Summer Scholarship*
- 2nd Place | \$150.00
- 3rd Place | \$100.00

2. BEST MODEL I Awards for best model describing design solution:

- 1st Place I \$100.00
- 2nd Place I \$75.00
- 3rd Place I \$50.00

3. BEST DRAWINGS I Awards for best drawings describing design solution:

- 1st Place | \$100.00
- 2nd Place I \$75.00
- 3rd Place I \$50.00

4. BEST AUTODESK 3D RENDERINGS I Optional category, Local Award, Awards for best 3D computer generated renderings describing design solution:

- 1st Place | \$100.00
- 2nd Place I \$75.00
- 3rd Place I \$50.00

5. HONORABLE MENTIONS I Honorable mention awards will be presented to noteworthy submissions at the discretion of the judges.

6. CERTIFICATE OF PARTICIPATION I Certificate of Participation will be presented to all entrants.

Awards for the Best Autodesk 3D Renderings Internationally will be posted on the Architectural Foundation of San Francisco webiste along with submission instructions. www.afsf.org

*CCA Summer Scholarship

Through the generosity of the California College of the Arts, the Best Design 1st Place prize winner will be offered a full tuition scholarship to CCA's Summer Pre-college Program in Architecture. CCA's Pre-college Program is a four-week intensive studio experience offered in July, Monday through Friday, 9:00am to 4:00pm at the Oakland campus. The student will earn 3 units of college credit. The value of the scholarship is \$2,700.00 per student.



START I JANUARY 22, 2013

Competition is distributed to high schools in the San Francisco Bay Area and posted to the Architectural Foundation of San Francisco's website.

DESIGNING I JANUARY 22, 2013 - APRIL 27, 2013

Students work on their designs, drawings and models.

KICK-OFF INCLUDING AMERICA'S CUP EVENT AUTHORITY PRESENTATION & AUTODESK REVIT TRAINING I FEBRUARY 23, 2013 I 10:00am - 3:00pm

LOCATION I 901 MISSION STREET, SUITE 110, SAN FRANCISCO, CA 94103

The Architectural Foundation of San Francisco will also provide a day-long introductory training in Autodesk Revit Architecture 2012 for teachers and students who are interested. Schools are encouraged to send teams of instructors and students to this training. To join the training session, send an email to <u>will@afsf.org</u>. Use "Revit Training" in the subject line and include your contact information in the body of the email. You will be notified be email of your acceptance. Students may download a free copy of Autodesk Revit Architecture 2012 at http://students.autodesk.com.

COMPETITION ENTRIES DUE I SATURDAY, APRIL 27, 2013 I 10:00am - 12:00pm (noon)

SUBMITTAL LOCATION TO BE DETERMINED

Bring your submission (presentation drawing board(s), model, and optional 3D perspective print outs & CD) to the submittal location within the 10:00am to 12:00pm window of time. You will be asked to fill out a registration form when submitting your entry. Submittal location will be posted on the AFSF website (2) weeks prior to submittal due date and instructors will be notified. For competition updates, please send an email to Will Fowler, <u>will@afsf.org</u>. Please note that late submittals will not be accepted! No exceptions!

JUDGING I SUNDAY, APRIL 28, 2013 I 9:00am - 4:00pm

LOCATION IS SAME AS SUBMITTAL LOCATION

Judges Only. A distinguished panel of judges will review every submission in private and determine the award winners.

AWARDS CEREMONY & RECEPTION I APRIL 28, 2013 I 4:00pm - 5:00pm

LOCATION IS SAME AS SUBMITTAL LOCATION

All are invited including entrants, their family and school faculty members. Winners will be announced and awards will be presented at this time. Jurors & the Competition Committee will be available after the awards reception to answer any questions you may have about the competition.

ENTRY PICK-UP I APRIL 28, 2013 I 5:00pm

All entries should be picked up following the awards presentation including the winning entries. Any entries left after the reception will be discarded.











PALESTROUG



view from south towards the San Francisco Bay & Golden Gate Bridge

view looking south west towards residential frontage



view looking east towards Fort Mason and boat docks



view along south west edge of site looking down Marina Boulevard



HEALTHY OCEANS PROJECT http://www.americascup.com/en/healthy-ocean-project

SITE:

http://en.wikipedia.org/wiki/Marina_Green http://www.sftravel.com/mgreen.html http://www.sfdpw.org/index.aspx?page=1488 http://www.fortmason.org/ http://www.parksconservancy.org/programs/crissy-field-center/

SAILING:

http://www.americascup.com/ http://www.cupinfo.com/en/americas-cup-34-the-next-americas-cup-details.php#Where: http://comminfo.rutgers.edu/~elfox/ http://en.wikipedia.org/wiki/Sailing http://www.sfsailing.com/cgi-bin/sfsailing/yachtclubs.cfm http://www.sailingmagazine.net/

ARCHITECTURE:

http://www.projectfrog.com/ http://www.envelopead.com/proj_octaviakl.html http://inhabitat.com/tag/temporary-architecture/ http://www.architizer.com/en_us/blog/dyn/tag/temporary-architecture/#.UPkkWTmVhFQ http://www.woodsbagot.com/en/Pages/IcebergsNYC.aspx http://inhabitat.com/open-air-cube-pavilion-made-from-donated-sustainable-materials/

SUSTAINABILITY:

Green Globes - <u>http://www.greenglobes.com/</u> LEED - <u>http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1970</u> Whole Building Design Guide - <u>http://www.bdg.org/design/sustainable.php The Living Principals - http://www.livingprinciples.org/</u> Sustainable Design Forum - <u>http://www.sustainabledesignforum.com/ http://inhabitat.com/category/architecture/</u>