



**AIA**  
Atlanta

# HSDC '19

High School Design  
Competition

**Beginner Program**

Pedestrian Bridge

**Advanced Program**

Chattahoochee River

Nature and Science Center

## Presenting Sponsor

**YKK**  
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YKK AP is pleased to support AIA Atlanta in such an inspiring initiative that gives high school students an engaging and fun platform to develop their design skills and showcase their talent. We continue to be amazed at the level of technical and creative skill displayed in the competition as many of these students will go on to shape the future of architecture.

Oliver Stepe  
President, YKK AP America Inc.  
[www.ykkap.com](http://www.ykkap.com)

# HSDC '19

## Welcome to the HSDC

Every year, the HSDC Committee works to make the competition exciting and fun for everyone. In recent years, we introduced the beginner competition to invite the participation of students of all skill levels. The beginner competition accepts individual entries while the advanced competition accepts both individual and group entries.

We realize that sometimes our advanced competition can be a challenge, especially when working alone. We also realize that designing buildings is never a solitary task, and it takes many minds and many more hands to bring a project to fruition. Group entries will be judged separately from individual entries, with prizes to be split evenly among team members. For more information, see the advanced competition section of this program.

The beginner competition remains an individual competition. It will be a chance for students to learn about plans, sections and elevations, as well as explore architecture by solving programmatic problems with creativity and ingenuity. This competition program is designed to be challenging and fun, and it asks students to explore design by defining space and creating distinct landmarks in our urban fabric.

The advanced program will be on par with the difficulty from previous competitions and will ask students to delve deeper into the realm of architecture and solve complex problems regarding site and programmatic adjacencies. While we are looking for a pragmatic solution to the challenge, the judges will also be looking for good design, attention to details and, of course, creativity. The students entering this competition will have to defend their choices by telling a solid story about what led them to those decisions.

Now, which competition will you choose to enter? That decision is up to you, your parents and your teachers. The two competitions offer very different experiences and you should decide based on your skill level and knowledge of drafting and design tools. While the decision is up to you which competition you want to participate in, we ask that you be considerate and enter the competition you truly feel you are qualified for, and don't be afraid to challenge yourself by entering the HSDC.

Thank you,  
The HSDC '19 Committee

Aaron Albrecht, AIA  
Adam Boswell  
Missy Bower  
Sean Fower, Assoc. AIA

Jonathan Gould, AIA (Chair)  
Anya Khalo, AIA  
Jennifer Kilpatrick, AIA  
Adam Lamb, AIA

Kirsten Reed, AIA  
Trevor Walker, AIA  
Robert Woodhurst IV, AIA

# HSDC '19

## HSDC Kickoff Meeting and Information Session

Saturday, January 26, 2019  
9:00 a.m. to 1:00 p.m.  
AIA Atlanta, 50 Hurt Plaza, Ste 109

Ever wondered what a site diagram is? Or, what is the best way to do program analysis? Or, how to get your awesome ideas out of your head and onto paper or a computer screen? Come and ask local Atlanta architects and designers at the HSDC Kickoff Meeting on January 26!

At the Kickoff Meeting, we will walk through both competitions, answer questions and help students get their ideas off the ground. Atlanta-area architects and designers will be on hand to guide students through the first stages of the design process and help students, parents and teachers plan the best way to tackle the competition.

At the meeting, we will break into three groups: beginner competition, advanced competition, and parent/teacher groups. The student groups will walk through the competition brief and the group leaders will break down each component of the competition. Students will learn more about the site, program and the analysis the judges will be looking for in the final submissions. We will also cover the basics of presentation and layout, including strategies for organizing your boards and simplifying the story you want to tell.

Parents and teachers will have an open discussion about the best ways to support and advise your students. We will go over many of the resources available for free online and through AIA. We will walk through strategies for staying on schedule and completing the competition. Architects and AIA representatives will gladly answer questions and take your advice on how to make this competition fun and competitive in future years. This will be your chance to give the committee feedback, and our chance to share advice and help your classroom and students achieve success.

Attending the kickoff is completely optional, but it is our way of supporting the community and we strongly encourage all students thinking of entering to attend. This is also a great way for students interested in architecture to meet and learn from local architects and get a small glimpse into the profession.

Registration for the event is on the website at [www.aiaatl.org/hcdc](http://www.aiaatl.org/hcdc)

We hope to see you there!

# HSDC '19

## Basic Information

Both the beginner and advanced competitions are open to high school students within the state of Georgia currently enrolled in grades 9–12. However, we ask that you enter the competition you feel you are qualified for. The beginner competition is designed for students in 9th and 10th grade or students with no or very little architectural background. The advanced competition is designed for 11th and 12th grade students and students who have experience with design. The goal of these exciting programs is to engage high school students in the design process.

## Registration Procedure

All registrations will be on-line through the AIA Atlanta website at [aiaatl.org/hsdc](http://aiaatl.org/hsdc). Each individual entrant or group representative must fill out and submit the registration form by 5:00 p.m. on February 22, 2019, to be eligible for participation. Registration for both competitions is FREE for students.

## Submission Deadlines and Procedures

All submissions must be received by 4:00 p.m. on March 22, 2019; late submissions will not be accepted. Submissions must be picked up at the HSDC award ceremony in April. Regrettably, we are unable to keep projects not retrieved on this date, or return submissions by mail. Review the competition briefs for detailed submission requirements.

### Deliver submission packages to:

Attn: Missy Bower  
AIA Atlanta  
50 Hurt Plaza, Suite 109  
Atlanta, GA 30303

### Contact

(404) 222-0099 ext 103  
[missy@aiaatl.org](mailto:missy@aiaatl.org)

## Judging

Judging will be held in April 2019. Winners will be notified by telephone and/or email and awards will later be presented at a reception. More information on the jurors, judging, and event will follow in February.

## Award Ceremony

AIA Atlanta, with presenting sponsor YKK AP, invites all participants, teachers and families to the award ceremony on April 18, at the Georgia Tech School of Architecture. Winning entries will be on display, and every student who wants to will have the chance to talk to a local architect about their own entry.

# HSDC '19

Beginner Competition

## CHATTAHOOCHEE CONNECTION PEDESTRIAN BRIDGE



## Evaluation

Creativity and imagination are the major considerations you should give this project. Evaluation of the final projects will be based on the following:

- Creativity and ingenuity of the solution
- Practicality of solution
- Understanding of the three basic drawing types: plan, section and elevation
- Consideration to site and elements
- Quality of drawings and presentation materials
- Completeness of submission drawings

## Awards

AIA Atlanta will recognize first, second and third place entries, along with honorable mentions, at the award ceremony in April 2019. The winners and honorable mentions will receive a special recognition award from AIA Atlanta. Teachers of winners will also be recognized.

## Submission and Presentation

Student submissions should be presented on a maximum of two boards sized 20" x 30" each. All boards must be in portrait/vertical orientation.

The minimum presentation drawings include:

- Site plan showing the site and surrounding context at 1/8" = 1' scale
- 1 Elevation at 1/4" = 1'-0" scale, minimum
- 1 section at 1/4" = 1'-0" scale, minimum
- 2 exterior perspectives (consider how material and interaction could be shown in images)
- Design process images: sketches, concept development ideas, photos of study models
- Paragraph describing the student's project and design concept (max 300 words), typed (or hand lettered) and attached to the board as part of the presentation

All drawings can be either computer generated or hand drawn – in fact, it is strongly recommended that the students use both mediums to explore their concepts. Hand drawing is a great way to explore ideas fast and begin to understand special relationships, while computer modeling is really good at refining concepts and making them plausible.

These are the minimum requirements, but if you need more documents to support your project, feel free to provide them. Consider the additional resources provided in starting to lay out drawings into a presentation. Information from study models and process is also encouraged.



### **Chattahoochee River Connection - Pedestrian Bridge**

The Chattahoochee River is an untapped resource in Metro Atlanta. The river cuts off circulation from one side to the other currently and does not engage the public like it has the potential to do. The area in focus is a small piece of land with a thriving neighborhood on one side of the river and a national park on the other side of the river, but the connection and uses are very separate physically and in terms of use.

The island in the center has been selected for a new, state-of-the-art Science and Research Center. Historically, rivers were gathering points used for everything from bathing, cleaning, fishing, drinking and transportation. How can you connect these two disparate sides of the river through this island to provide access to the new center and bring activities back to the river in a way that benefits the environment?

### Program Overview

Provide a connection between the two sides of the river and a point of entry to the Science and Research Center. The design should consider how to engage people in the river area and not only as a means of circulation. Think about how the circulation and movements can work with moments of nature and places of activity in a beneficial way and not interrupt others. Provide entry points for people powered transportation for both land and water. The swimming pool should integrate with the river in a way that engages people with nature and draw the public in. Create a gateway and entry experience to the science center on the island inspiring a sense of arrival. There should also be area for fishing and moments of reflection to enjoy the natural surrounds. How can you create a space that provides a connection to nature; between different activities; between action and tranquility; between water and land; and between the two sides of the river? How can these elements complement each other rather than detract from one another?

### Program Breakdown

Your design should include:

- Point of entry/gateway to the Science and Research Center
- Swimming area integrated with the river
- Kayak and tube launch area
- Place for trout fishing over the river
- Space for contemplation, reflection
- Access points at points A, B, and C on the map
- Connections between A, B and C on the map
- Motorized vehicles are not allowed on any portion

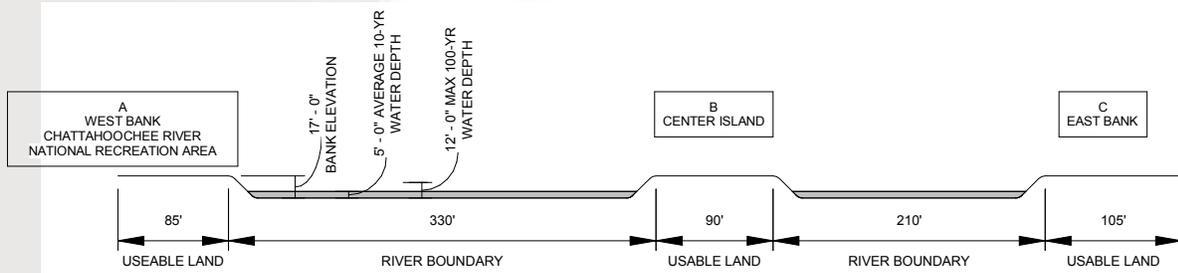


### Site: Chattahoochee River National Recreation Area

On the northern side of Metro Atlanta is the Chattahoochee National Recreation Area and Island, near Roswell. Here, the Chattahoochee River takes a northern turn and has an island between the preserve on the west and the City of Roswell on the east. There are 3 points that will make up the entry point to this design. A: The park on the west side of the river has a recreation area with parking, hiking trails, fishing and a tube launch. B: The island in the middle of the river is the location for a new Science and Research Center. C: The east side of the river in Roswell has a burgeoning Riverwalk Trail for pedestrians, cyclists and walkers. The challenge of this design is to connect all 3 of these areas. The design of the connector needs to link all 3 of these areas in a way that benefits all users.



### Site Section



CHATTAHOOCHEE RIVER CROSS SECTION AT ISLAND BAR SHOALS

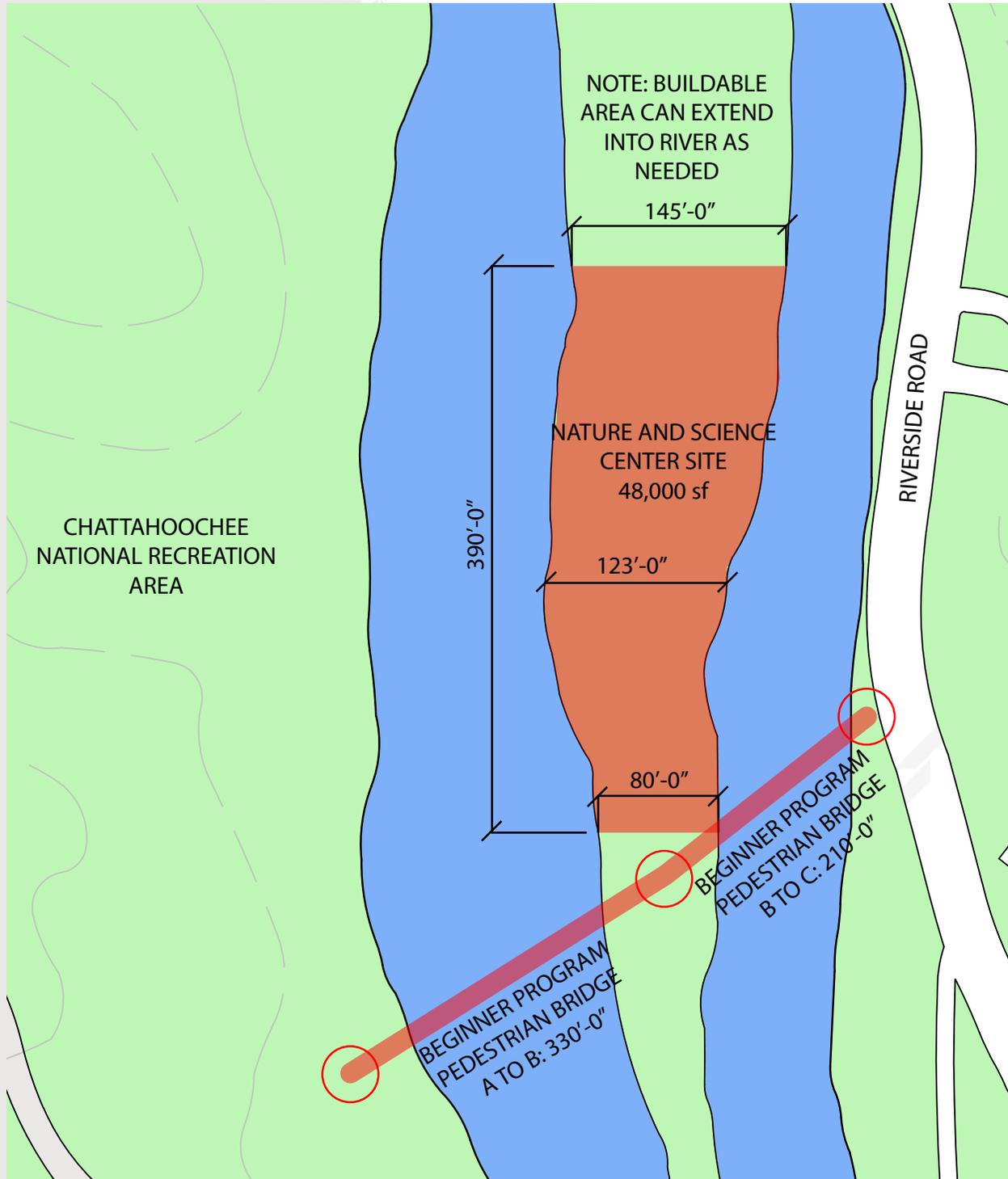
SCALE: 1" = 160'-0"



### Current Site Conditions



## Site Map with Advanced Program Boundaries











# HSDC '19

Advanced Competition

## CHATTAHOOCHEE CONNECTION NATURE AND SCIENCE CENTER



El Humedal in Valle de Bravo by TAAR  
Photo: Rafael Gamo

## Individual and Group Entries

The advanced competition accepts both individual and group entries. Individual and group entries are judged separately. Groups can be 2-4 people, with prizes to be split evenly among all members of the group. Individual entries and classes are still encouraged to share ideas and common work, like precedent, program, and site research, but the final submission must be completed by an individual.

## Evaluation

The advanced program will be judged using similar criteria as the beginner program, but with higher expectations of thought and consideration about your decisions. Criteria is as follows:

- Practicality of solution
- The clarity of the presentation and defense of the choices you have made
- Through supporting drawings, diagrams or written descriptions
- Quality of drawings and presentation materials
- Completeness of submission drawings

## Awards

The following prizes are awarded in the form of a scholarship to the college of the winner's choice:

<b>Individual Entry</b>	<b>Group Entry (Split Between Group Members)</b>
First Prize: \$1,200	First Prize: \$1,200
Second Prize: \$750	Second Prize: \$750
Third Prize: \$500	Third Prize: \$500

Honorable mentions will be awarded at the jury's discretion. The winners will be announced and their work will be presented at an AIA event, which will include a talk from a local architect and a reception.

## Presentation and Submission

Submissions must be presented on a minimum of three boards, with a maximum of four, sized 30" x 20" each. All boards must be in portrait/vertical orientation.

### **ALL ENTRIES MUST BE CLEARLY LABELED "INDIVIDUAL" OR "GROUP" ON THE FRONT TOP LEFT CORNER OF ALL BOARDS.**

The minimum presentation drawings include:

- Site analysis diagrams showing why you chose your site
- Site plan showing the site and surrounding context (just showing the site boundary is strongly discouraged) – scale will vary depending on site
- Floor plans for each level, at least 1/16" = 1'-0" scale
- Building elevations, match floor plan scale
- 2 sections, match floor plan scale
- Building perspectives (2 minimum)
- Design process images: sketches, concept development ideas
- Paragraph describing the student's project and design concept (max 300 words), typed and attached to the board as part of the presentation

These are the minimum requirement; more documents can be provided if needed.

## **Program: Chattahoochee River Nature and Science Center**

The advanced competition asks students to consider a built intervention that will promote interactions with one of Atlanta's often underutilized natural resources: the Chattahoochee River. One of several destinations tied to the new pedestrian bridge (see the beginner competition), the new Chattahoochee River Nature and Science Center will be a research and education center situated within the Chattahoochee River National Recreation Area. Physically and cognitively immersed in the River's various ecosystems, the facility will be uniquely suited to explore natural processes in an urban context.

Research, education, community outreach and nature all come together in a brand new, state-of-the-art facility located on an island in the Chattahoochee river. Scientists and students from all over the state of Georgia will come to this center to research the effects of pollution and climate change on an urban waterway. Students will learn from hands on activities in labs as well as excursions into the surrounding wetlands and river ecosystems. Scientists will have the unique opportunity to engage in hands-on research on wildlife and urban waterways, while teaching middle and high school students about the best ways to protect our natural environments.

The Nature and Science Center will have brand new facilities that include classrooms, labs, lecture halls, and digital learning labs. The research and education elements will have limited access for students and researchers, while public areas, such as the lecture hall and exhibition space, will be open to the general public. Designers will have to look at adjacencies, user access, and connection to natural environment to determine layout and floor plans.

The site is a heavily wooded island in the Chattahoochee River, as well as the river itself, which brings unique challenges and opportunities. As a part of the National Recreation Center, the site is a natural oasis in the middle of a sprawling city. How will your design reconcile the high tech world of research with the natural setting of the Chattahoochee River? Should its materials blend in with the surroundings or be an independent architectural statement? Does it strictly bound the inside/outside or thoughtfully blend them? How might it encourage inhabitants to venture out or invite those outside to wander in?

Your task for the HSDC '19 is to design a Nature and Science Center focused on education and research that responds to the unique site and landscape while providing state of the art labs and facilities.

## Program Breakdown and Considerations

Students are required to provide designs that incorporate the required program listed below. Students can add program elements if they feel it enhances the project.

### Required Programming Elements

#### Research

Lab Spaces (2 Required)	1,000 SF each
Specimen Storage	500 SF
Shower/Mud Room	100 SF
Lab Storage	500 SF
Equipment Storage	400 SF
Waer Access/Dock	---

#### Educate

Public Lobby/Exhibit Space	1,500 SF
Lecture Room	1,500 SF
Classroom	800 SF
E-Learning/Broadcast Room	800 SF
-Stage Area	
-Control Room	

#### Manage

Reading/Research Room (2 Required)	500 SF each
Office Area	
Offices (3 Required)	150 SF each
Break Room	200 SF
Reception Area	200 SF
Conference Room	400 SF

#### Operate

General Storage	500 SF
Restrooms (2 Mens, 2 Womens)	200 SF each
Mechanical	100 SF
Electrical	100SF
Janitor	100 SF
Stairs (if needed, 2/Floor)	200 SF each
Elevator (if needed)	150 SF

**Net SF** +/- 12,000 SF

**Gross SF** (Including Circulation) +/- 15,000 SF

## **Program Considerations**

Certain specific elements of the Chattahoochee River Nature and Science Center require seemingly opposite approaches: the laboratory and research spaces should be controlled and methodically structured while the education and display spaces might work best when invitingly open and adaptable to various programs. The inside spaces will want to be efficiently organized and clean (even sterile in some cases) while the object of study is chaotic and dirty. How should the architecture address these conflicting notions?

## **Program Descriptions**

### **Lab Spaces**

Lab spaces function as the primary location scientists observe and collect data in a sterile environment. These spaces will only be accessed by researchers, but consider how to mix clean/sterile laboratory conditions with education and public spaces. Other major considerations for lab spaces are solar orientation and the adjacency to the exterior.

### **Specimen Storage**

Specimen storage shares adjacency with the Lab spaces and also has a consideration for solar orientation. Many laboratory studies can be affected by outside factors like sunlight and air contamination.

### **Shower/Mud room**

The shower/mud room helps protect the sterile environment of lab space for researchers, and also houses storage for river equipment and clothing. This space shares adjacency to lab spaces and exterior of the building or water access location.

### **Public Lobby/Exhibit Space**

The lobby and exhibit spaces serves as the public entrance to the research center. Consider how the public spaces are adjacent to the research spaces as well as indoor/outdoor spaces. The exhibit space could function for public events, art and science exhibits, and lobby meeting space.

### **E-learning Broadcast Room**

In order to reach a larger audience, the research center will provide access to a broadcast center. The researchers will be able to live-stream talks or host conversations that will be recorded and broadcast to classrooms around that nation. This room will also have expensive equipment, so access to this area will need to be monitored.

### **Reading/Research Rooms**

Reading/research rooms provide area for researchers to continue their research outside the sterile lab. These spaces will only be accessed by researchers for study and library research.

### **Offices**

Offices are for support staff and researchers to help run the centers and coordinate visiting groups and students.

## Site: Island Bar Shoals, Chattahoochee River

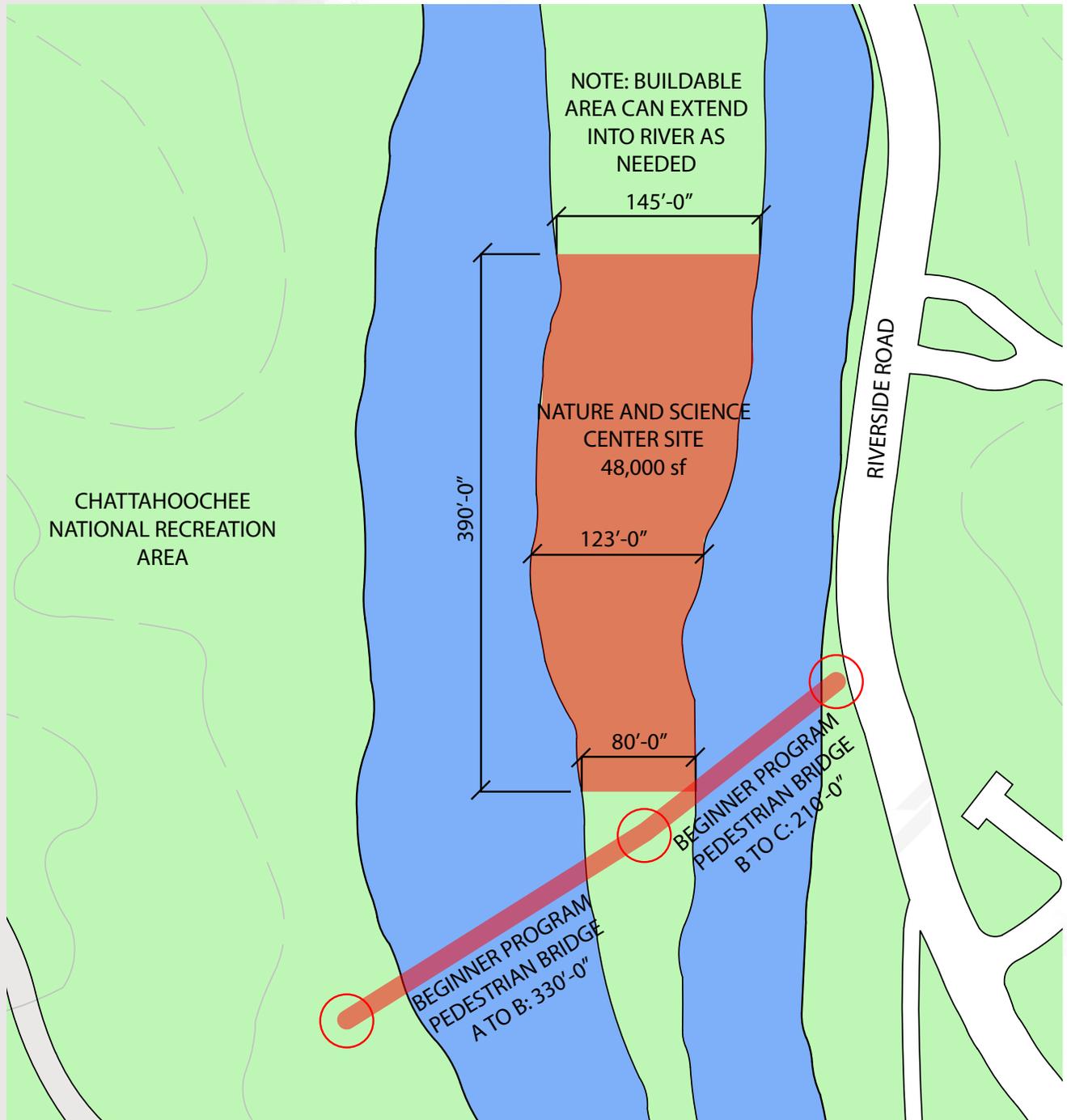
This year's competition site is situated on an island in the Chattahoochee River and part of the Chattahoochee National Recreation Area. This site proposes a lot of challenges, including its intense ties to nature and its relationship with water. The river is both an asset and a challenge: it invites the research center to interact with it, but also poses the problem of flooding. How will you address the river? How will your design become a part of the ecosystem?

Access to the site will be provided by a pedestrian bridge being designed as part of the beginner competition, how will your center respond to this bridge? What other concerns would being on an island raise?

As a project dedicated to nature, ecological considerations should be prominent in a successful design. How will the building avoid flooding while staying accessible to all visitors? What will be the impact on the site's plant and animal life and should they be able to engage the building? What potential energy-saving - features such as solar-orientation to maximize interior daylight, harvesting rainwater for non-potable uses, and alternative energy sources - could be introduced?



## Site Map



## Site Analysis

Site analysis is one of the most important parts of any project, and can make a big influence on your final design! So, what is site analysis and how do I go about it?

First, site analysis is a way of looking at the site and finding relationships between your site (the boundary line that your building must fit into) and the surrounding areas. Common relationships to explore include the following:

- Site access – How do people arrive at the site (where is the front entrance)? How do people leave (where is the exit)? What modes of transportation are they taking (walking, biking, driving, bus...)?
- Views – What can be seen from the site (internal)? Are there any views that should be highlighted? What can my building be seen from (external)? Where will my building's focal points should be facing?
- Environmental – Does my site get lots of sun? Rain? Snow? Wind? Are there lots of trees? Animals? Birds? How does my building respond to the environment?
- Other Considerations for site:
  - Density of surrounding areas
  - Population demographics
  - Styles and materials of surrounding buildings
  - Uses of surrounding buildings (public vs. private)
  - Historic uses for the site and area

To begin exploring these ideas, start by diagramming the site. A diagram is a type of drawing used to communicate information. We suggest starting with a map of the site and surrounding areas and drawing lines to represent access points, or views, or solar angles, or whatever else you think will influence your project. You might find by doing this that the views are boring from your site and are actually not important to your building, or you might find the exact opposite. This part is all about exploring ideas and building a case to support the decisions you will make when designing your building.

## Design Process

This competition is a schematic design competition, looking to hone your design skills and get you thinking conceptually about architecture and design. But what does schematic mean?

The schematic design phase is the first phase of any architecture project, where you explore ideas, have fun and get messy. We are looking for creative solutions to the problem that are plausible and engaging. That does not mean you have to have all of the details figured out. Work hard to develop a concept and an idea that drives your project, figure out how the different parts respond to that concept, and then sell that concept to the jury.

Here are some key things to consider for this level of development:

- Space adjacencies and site layout – how are all of your parts working together to create a cohesive experience?
- Understanding site constraints, opportunities and connections
- Sizes, shapes and volumes of spaces – interior and exterior
- Massing and form of your project
- Concept – the main idea driving your project. Check out our jury video from last year's competition to get a good of idea how concepts can influence your design at [aiaatl.org/hsdc](http://aiaatl.org/hsdc)

Winning HSDC entries will have a strong concept statement. These design concepts can range from a general idea of how the building should integrate within its site to an external concept that is as whimsical as an artistic expression. Design concepts can also be rooted in exploration of building systems, like structure or sustainability.

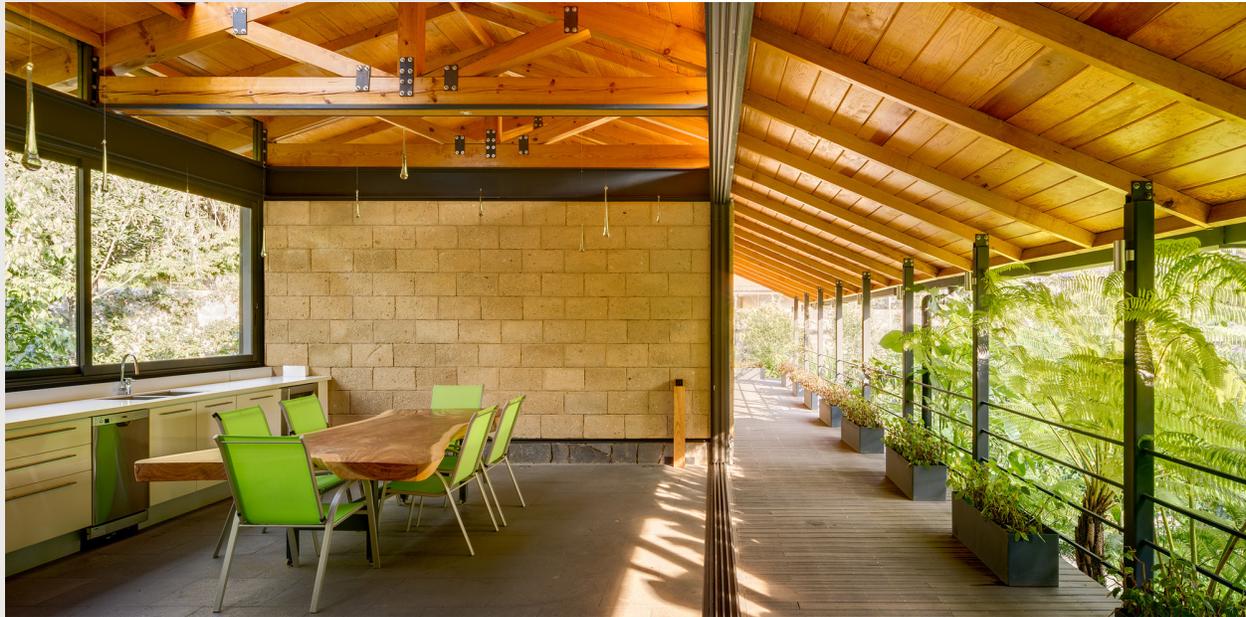
As you develop your project and design concept, you should be considering your final presentation by documenting your sketches and the design changes that occurred throughout your process. Submissions should include both a written paragraph describing their project and a series of drawings or images that explains the design process and concept for the project.

Take some time to put pen to paper and sketch your ideas, and don't forget to include these drawings in your final presentation; the jurors love seeing how an idea and concept came to life and how you explored your concept from the beginning.

## Precedent Examples

### El Humedal in Valle de Bravo by TAAR Photo: Rafael Gamo

The building generates a 100% of the resources that it needs to operate and does it in a closed loop. And the design is place based reflecting local culture, it uses a high percentage of local and recycled materials that are harmless to humans and the environment.



<https://www.archdaily.com/894278/el-humedal-taar-taller-de-arquitectura-de-alto-rendimiento>

### ICTA-ICP Building at Universitat Autònoma de Barcelona by H Arquitectes and DATAE Photo by: Adrià Goulà

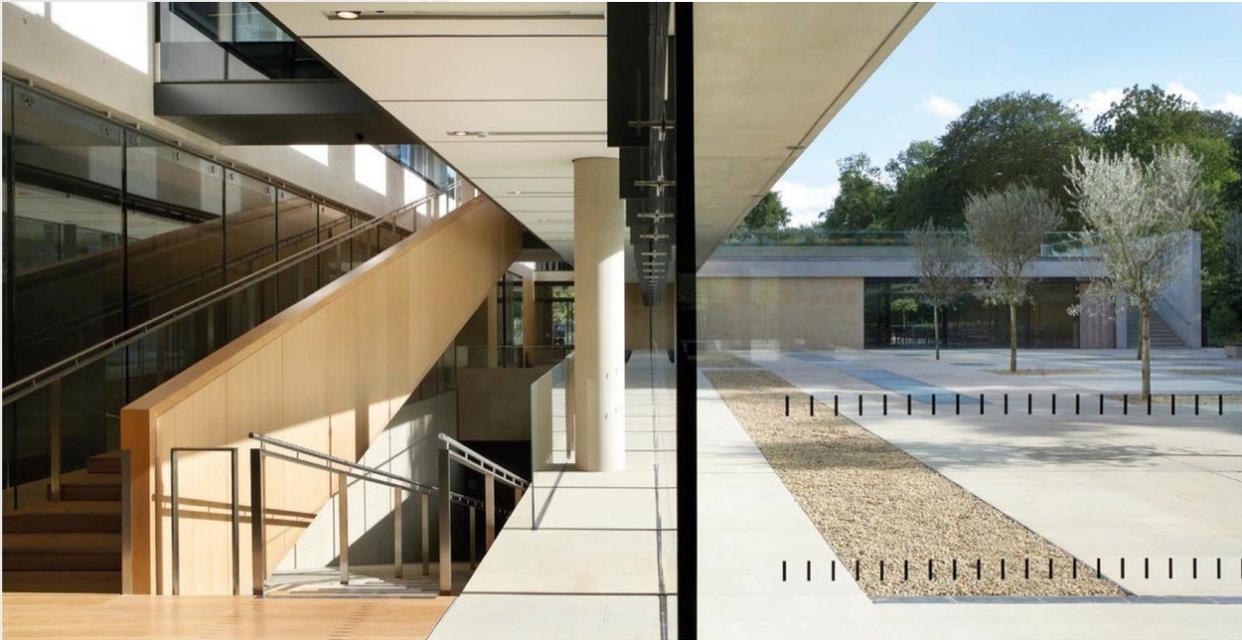
The concrete structure is wrapped and protected by a low cost exterior bioclimatic skin. By installing a greenhouse industrialized system that opens and closes its mechanisms automatically, the solar gain and ventilation are regulated.



<https://www.archdaily.com/636587/research-center-icta-icp-uab-h-arquitectes-datae>

## Precedent Examples

Sainsbury Laboratory / Stanton Williams  
Photo by: Hufton+Crow



The design reconciles complex scientific requirements with the need for a piece of architecture that also responds to its landscape setting. Solidity is implied by the use of bands of limestone and exposed insitu concrete, recalling geological strata. At the same time, however, permeability and connections – both real and visual – between the building and the Garden have been central to its conception. It is designed to promote encounters and interaction between the scientists working in the building, and between them and the landscape/

<https://www.archdaily.com/154728/sainsbury-laboratory-stanton-williams>



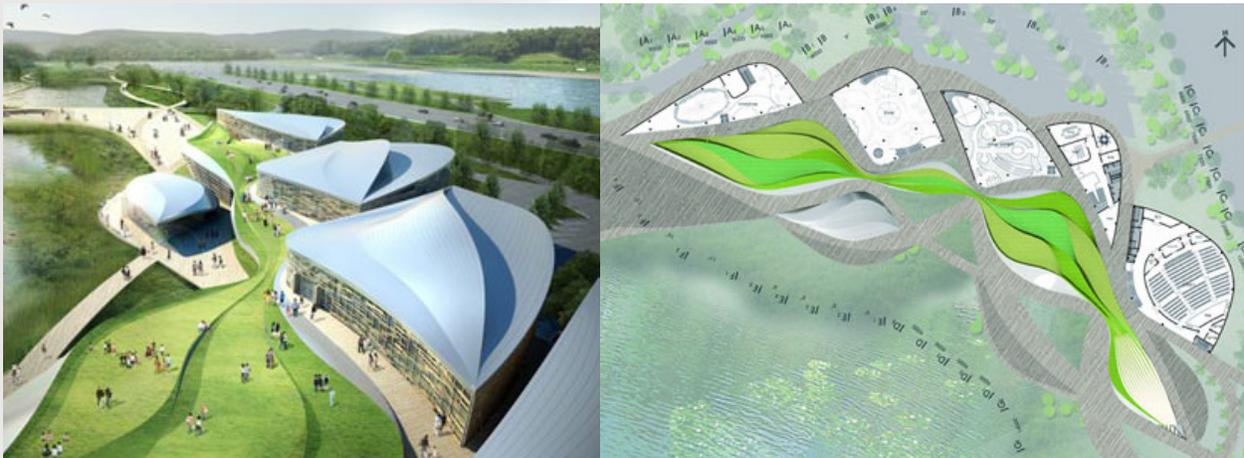
## Precedent Examples

Suncheon International Wetlands Center by G.Lab\*



G.Lab\* by Gansam Architects and Associates of Seoul have designed a visitors' centre for the wetlands in Suncheon, South Korea. The design was based on the imprint left by receding tides identified with meandering pathways which encourage and direct visitors to experience the wetlands and outdoor exhibitions.

<https://www.dezeen.com/2010/01/15/suncheon-international-wetlands-center-by-g-lab/>



## Other Considerations

### Universal Design (Accessibility)

One of the major considerations for any project is making it readily accessible and usable by all persons with disabilities. It is very wise to consider how people will maneuver and enjoy being a part of your project. Here are a few questions to keep in mind throughout your design process:

- How does one access the different parts of your site?
- Is there elevator access to every level? Is there ramp access? Which type of access best suits your design?
- Are there parts of your building that are not accessible? Why or why not?
- What cues throughout the project would help a person with a disability navigate around?

These are big questions and big concerns, but do not get too lost in these issues. Take some time to consider them and show the jury your ideas and your thought process. It doesn't have to be perfect, but acknowledging that these issues are real and that you have tried to solve these challenges will go a long way in the jury's mind.

### Sustainability

Sustainability is one of the key issues that define this generation. When building today, we must think about tomorrow and the impact we are having on the environment. So, when designing your project consider how it is positively or negatively impacting the city and its inhabitants. Consider some of the following aspects of sustainability for your project:

- How much energy does the building use?
- Buildings account for 36% of total energy use in the US and 65% of electricity consumption!
- How does your building use energy wisely?
- Does your project incorporate renewable energy?
- How does your building address solar heat? Does it use systems to shade, or does it harvest the energy to heat the building?
- What strategies does your building use to minimize water use? Rain water collection? Green spaces?

Take some time to consider the potential sustainable features of your project. Perhaps sustainability could be a driving concept for your design.

### Urban Planning and Design

One of the key factors of the site is its proximity to the MARTA rail line, to Centennial Olympic Park, and of course to Downtown Atlanta. But how does your building connect to these places?

Take a moment to consider some of the following urban design challenges:

- How does your building relate to the ground and the surrounding areas?
- Does your project encourage walking or driving or the use of mass transit? Or does it do all 3? Or 2?
- Where are the visitors coming from and how do they get there? What is the experience like approaching the building from the street level?
- How does the project encourage smart community growth and interaction?
- Will people enjoy being at your site?
- Urban planning is complicated but it could be a great way to begin to develop your concept, and it should have some major influence on your design and the decisions that you make.

## Other Considerations

### Light and Daylighting

Light is important to any inhabited space, but can cause large areas of glare, which can be a deterrent for indoor playing fields. Are there ways of providing natural light in the space, without compromising a player's ability to see on the field? What are the best ways and locations to use natural daylighting? Furthermore, consider what is the importance of light? What does natural light provide a user? Consider orientation of the fields to morning and evening sun.

### Adjacencies and Mixed Uses

What is the best location for a research lab or classroom? Are there ways in which you can combine or overlap spaces and functions to serve multiple purposes? How will an individual move from one space to another? Feel free to get creative with how you organize your spaces, but remember to back them up with strong reasoning and precedence.

### Wellness/Mindfulness

Health isn't just about a physically fit body. A well-rounded approach to health includes lifestyle, wellness and mindfulness. How do these connect to the rest of the program and how can the building reinforce these ideas? How should an environment be designed to encourage wellness and a healthy lifestyle?

### Connection to Nature

There are many ways to make a connection to the natural surroundings of the site. It can be a physical connection, through an opening or walkway, or a symbolic connection through use of material or lighting. Making these connections can help influence your design, whether is bring nature into your building or making your building an integral part of the surroundings.