



AIA
New Hampshire



Monadnock State Park Welcome Center American Institute of Architects New Hampshire Chapter

2019 High School Design Competition Program



Educational Objectives

- To increase awareness of the relationships between space, human scale and function.
- To gain experience in recognizing the various challenges in planning and designing indoor and outdoor spaces for specific uses.
- To exercise your analytical abilities and creativity in solving the problems you have defined.
- To practice communicating your planning and design ideas utilizing scale drawings and models.

Participation Requirements

Every participant must be a current high school student in the state of New Hampshire or any high school student who is a resident of New Hampshire. Students may work individually or in teams. Teams may not consist of more than three students.

Registration

Teachers must register participating students by Friday January 25, 2019 with the attached form.



AIA
New Hampshire



Introduction

Sustainable Living and Innovation Center

Monadnock State Park is located in and around the 3,165-ft. Mount Monadnock. The park is surrounded by thousands of acres of protected highlands. In 1987, Mount Monadnock was designated a National Natural Landmark. The park offers year-round recreational opportunities.

This year's AIANH Design Competition will be to design a new Welcome Center for Monadnock State Park in Jaffrey, New Hampshire. The Welcome Center will serve as the welcome point for visitors to the park, a place to learn about the park and to check in for campsites.

General Information (from Wikipedia)

Mount Monadnock, or **Grand Monadnock**, is a mountain in the [New England](#) state of [New Hampshire](#), known for its presence in the writings of [Ralph Waldo Emerson](#) and [Henry David Thoreau](#). It is the most prominent mountain peak in southern New Hampshire and is the highest point in [Cheshire County, New Hampshire](#). It has long been known as one of the most frequently climbed mountains in the world.

At 3,165 feet, Mount Monadnock is nearly 1,000 feet higher than any other mountain peak within 30 miles and rises 2,000 feet above the surrounding landscape. Mount Monadnock, 62 miles northwest of [Boston](#) and 38 miles southwest of [Concord](#), is located within the towns of [Jaffrey](#) and [Dublin, New Hampshire](#).

The word "[monadnock](#)" is an [Abenaki](#)-derived word used to describe a mountain. Loosely translated it means "mountain that stands alone",^[6] although the exact meaning of the word (what *kind* of mountain) is uncertain. The term "[monadnock](#)" has come to be used by American geologists to describe any isolated mountain formed from the exposure of a harder rock as a result of the erosion of a softer rock that once surrounded it.

Monadnock's bare, isolated, and rocky summit provides expansive views. A number of [hiking](#) trails ascend the mountain, including the 110-mile [Metacomet-Monadnock Trail](#) and the 50-mile [Monadnock-Sunapee Greenway](#).

Site Plan available for download from:

<http://www.aianh.org/education/outreach/high-school-design> PDF, DWG

Building Program and Area Needs:

The Welcome Center will be a one-story structure. There is no predetermined height, however the height must respect the surrounding environment as well as compliment the building's function and design.

Building – General

The client for this project is the NH Division of Parks and Recreation. The mission of the Division of Parks and Recreation is to provide New Hampshire's citizens and guests with outstanding recreational, educational, and inspirational experiences through the responsible management and cooperative stewardship of the state's natural, recreational, and cultural resources.

There is no specific style or building appearance required for design submission, however the Division of Parks and Recreation is looking for a building with a "rustic" character, constructed using natural materials, and that can stand up to the elements and lots of use by the public.



AIA
New Hampshire



Interior Spaces: (Actual space provided may vary by up to 10% of the target square footage listed)

- **Entrance (200 sq. ft.):** This space, which will include a vestibule, serves as a main entrance into the building and must be recognizable from the exterior with a clear purpose. Must be easily visible from the information desk.
- **Information/Camping Check In Desk (125 sq. ft.):** Space for two staff members to welcome visitors and direct them to appropriate areas of the building or park, as well as handle camp site check ins and cashier function for the Gift Shop. Must have direct visual access to the Main Entrance, and maximum visual access to all other public spaces.
- **Gift Shop (650 sq. ft.):** Low fixtures and shelving for merchandise, adjacent to Information Desk.
- **Staff Offices (300 sq. ft.):** Main director office, staff workspace with 2 desks and storage of miscellaneous office supplies and equipment.
- **Great Room (+/- 600 sq. ft.):** This space will contain displays and information about the park and the mountain. There should be views to the surrounding area and there should be a sitting area adjacent to a large stone fireplace.
 - Access from the Great Room to outdoor space can be a design option. This can be to an exterior space at grade or to a raised deck area.
- **Accessible Restrooms (sq. ft.):** Accessible Men's and Women's restrooms. One restroom for each gender. Include 6 Men's Water Closets and 8 Women's Water Closets with partitions (two of these may be substituted for a urinal for the men's room) and 6 lavatories in each restroom.
- **Family Restrooms – 2:** These rooms should include a toilet, a sink, a bench and a changing table. It would be most helpful if these rooms were located so that they could serve as restrooms accessible directly from the building exterior during the winter months.
- **Multi-purpose/Meeting Room (350 sq. ft.):** A room for lectures, seminars or meetings. This room should accommodate 30 people. The perimeter walls can be used for additional display surfaces. This room could also be used for organizing work parties, staff coordination, and a rescue command center.
- **Utility Closet (100 sq. ft.):** Service sink and janitorial equipment.
- **Public Circulation:** Interior circulation, corridors as required.
- **Mechanical & Electrical spaces (30 sq. ft. ea.):** Separate rooms for Electrical and Mechanical equipment.
- **Observation Platform (Optional):** An observation platform may be added to the project program. If you choose to include a platform, it must be accessible to all visitors.



Exterior Spaces:

- **Porch/Veranda:** Please include a covered space attached to the Welcome Center that can serve as an outdoor seating area.
- **Outdoor Program Area:** This exterior space should be visible from the visitor's center. There should be room for seating 30 people and a fire pit. This space may also function as a starting and ending point for hiking in the park.

Parking Areas: Existing parking on site should remain. Reconfiguration and improvements to the parking area can be proposed. Accessible parking including a Van Accessible space should be located closest to the main entrance. During peak visitation times of the year there should be ample bus parking to accommodate up to 8 coach buses

Sustainable and High Performance Design

A fundamental goal of this building is to embrace sustainability. In order to reduce the overall impact of the building in the environment, the pavilion will integrate innovative green building strategies such as:

- increase energy efficiency through the use of natural day lighting and smart shading systems
- water efficiency through the use of low flow fixture
- use of renewable energy to help achieve Net Zero energy consumption
- materials which will reduce consumption, pollution and waste
- materials that will be durable and do not require special maintenance

Sustainability Resources:

- NH State Energy Code info <http://www.puc.state.nh.us/EnergyCodes/energypg.htm>
- LEED – <http://www.usgbc.org>
- Green Globes – <http://www.greenglobes.com/>
- Whole Building Design Guide – <http://www.ubdg.org/design/sustainable.php>
- The Living Principles – <http://www.livingprinciples.org/>
- Sustainable Design forum – <http://www.sustainabledesignforum.com/>
- Energy Star – <http://www.energystar.gov>
- Northeast Sustainable Energy Association – www.nesea.org

Accessibility

All public buildings must be fully accessible. This includes accessible parking spaces with an accessible route from the parking to the building entrances, an accessible route to all public spaces and staff work spaces, and public restrooms. Exterior spaces should also be accessible.

Accessibility Resources

- Americans with Disabilities Act http://www.ada.gov/2010ADAstandards_index.htm
- NH Governor's Commission on Disability <http://www.nh.gov/disability/>
- http://publicecodes.cyberregs.com/icod/ibc/2009/icod_ibc_2009_11_sec001.htm



AIA
New Hampshire



Submission Requirements

- Design Boards should be 20" x 30" on ¼ inch foam core (required) and include the following: (see sample presentation layouts, attached)
 - Design sketches, design process and inspiration information
 - Site plan
 - Floor plan
 - Exterior and interior elevations
 - Building section(s)
 - Exterior and/or interior perspective(s)
- 1/16" Scale model - Model size limit is 20"x30" max. (Please no wooden bases; foam core preferred)
- Brief project narrative – Compose a thoughtful and concise text summary (approximately 150 words) describing your building design. This can include but not limited to:
 - The main ideas and goals behind your design
 - How the building is organized
 - How you envision people occupying the building

Timeline (specific dates to follow)

April 2019 Entries are due by **Friday, April 12, 2019, 4 pm.**

Winners of the AIANH High School Design Competition will be invited to an AIANH event at which projects will be on display and awards will be presented. We are working on an event with the Keene State College Architecture Department at the TDS Building. The date will be confirmed and we will let you know as soon as possible.

Projects should be shipped or delivered to:
Michael Petrovick, AIA
Catlin + Petrovick Architects, PC
51 Railroad Street Suite 130
Keene, NH 03431

Cash awards will be presented to the top two winners in each category below at the discretion of the jury:

- **Best Design, Overall Superiority, in all aspects of Design Solution, Model and Graphic Presentation**
- **Best Model describing Design Solution**
- **Best Graphic presentation describing Design Solution**
- **At the discretion of the judges, certificates will be presented to other submissions that are noteworthy.**



The AIANH High School Design Competition is a program of the New Hampshire Chapter of the American Institute of Architects.



AIA
New Hampshire



American Institute of Architects New Hampshire Chapter 2019 High School Design Competition Program

Registration Form

Use this form to register students for the competition.

Students may work individually or in teams. Teams may not consist of more than three students.

Please registration each individual working alone and each team. If registering a team, please include each team member's name, email, home address, and phone number. (We need emails to inform students of the results and the postal addresses to mail awards if not retrieved at the Awards Ceremony.)

Please send this form by email *or an email with all the required information* to:

Bonnie Kastel, Executive Director, bkastel@aianh.org

Receipt will be confirmed, so if you don't hear from us please check that your email was received.

Teacher/Instructor Name:

Teacher/Instructor Email:

Teacher/Instructor Telephone:

School:

School Address:

Please list name, address, email, and phone number of each student. Designate teams if appropriate.

Registrations should be received by the AIANH office by Friday January 25, 2019.

CRITIQUES: After the AIA New Hampshire office has received the participating High School/Academy's registrations, an AIANH architect will be available to critique the students' work. The earlier you contact us about arranging this, the more likely we will be able to come to your classroom for critiques. Please make arrangements through the AIANH office.