AIA Alaska

A Chapter of the American Institute of Architects

2015 Frank Maier High School Design Competition - *50th Anniversary*

"A Harborage for Cultivating Change"

INTRODUCTION AND HISTORY

The Alaska Chapter of The American Institute of Architects (AIA Alaska) is pleased to announce the 50th Anniversary of the AIA Alaska Frank Maier High School Design Competition. The competition is an annual architectural design challenge sponsored by the Alaska Chapter of the American Institute of Architects. Frank Maier, a Juneau Architect, started this program in 1965 and managed it personally for the first twenty years. Following his death in 1991, AIA Alaska elected to name the competition in his honor. Now, completing its fifth decade of success, the competition continues to expose Alaskan high school students to architecture and the profession.

Throughout the years the competition has challenged hundreds of high school students with a variety of building types and sites of Alaskan relevance. Past programs have included both rural and urban sites for a wide range of facilities such as a Library of the Future, Rural Air Taxi Facility, Talkeetna Ski Chalet, Urban Coffee House, Youth Hostel, Wellness Retreat, Wilderness Retreat, Whale Watching Census Station, Visitor Centers, and Mt. Denali Cabin to name a few. The program has evolved to encourage student's development of computer aided design (CAD) and building information modeling (BIM) software skills. Energy efficient and sustainable design solutions are now being emphasized in the design programs. In addition to providing high school students with professional feedback on their design submissions, all entrants are provided with a certificate of participation. Four place winners will be awarded a cash prize and their design submissions posted on the AIA Alaska website.

SUBMITTAL REQUIREMENTS & RULES

Eligibility: Any student (grade 9-12) presently enrolled in Alaska high school classes may submit one entry.

Time Allowed: Competition work shall be accomplished between January 5, 2015 and April 17, 2015. ***Entries must be postmarked by Friday, April 17, 2015***

Supervision: All competition work shall be performed by the entrant under the supervision of a high-school faculty member, preferably, but not restricted to, an Art, Drawing, Computer-Aided Drafting, or Manual Drafting Instructor. The competition may be accomplished as a part of class work or as an extracurricular project. Entrants may work at home. Additional assistance may be provided from local Architects and staff that are able to visit classrooms.

Required Deliverables: At a minimum, each submittal shall include:

NARRATIVE: Provide a short written statement, approximately a page in length, describing your project in your own words. The narrative should be single spaced in 11 point font. This narrative could include some practical considerations that shaped your design, or a description of why your solution may differ from the provided requirements in some way. Attach the page with a paper clip to the drawing and include the same identification information as the drawings to ensure we will associate the correct narrative with the correct design. The intent is for the design to speak for itself, but the narrative portion is critical and will be reviewed as part of the judging process, and may be used to clarify and establish cause for awards. The narrative portion of the project is a good way for the designer to learn how to express their ideas verbally as well, in preparation for any future presentation of his or her work.

SITE PLAN: Show your design solution as it relates to its context. Show surrounding features, walkways, potential parking areas and site entry areas, benches, signs, trees or other landscaping and physical features, etc. that show how your design solution would be used, and how this facility will incorporate into its setting.

FLOOR PLAN(S): At a scale of 1/8" = 1'-0", draw a floor plan for each level of your building (s).

ELEVATIONS: At a scale of 1/8" = 1'-0", draw at least two elevations of your building best describing your project. Alternatively, you may submit one elevation and one three-dimensional or isometric drawing.

BUILDING SECTION: At a scale of 1/8" = 1'-0", show a cross section of your building.

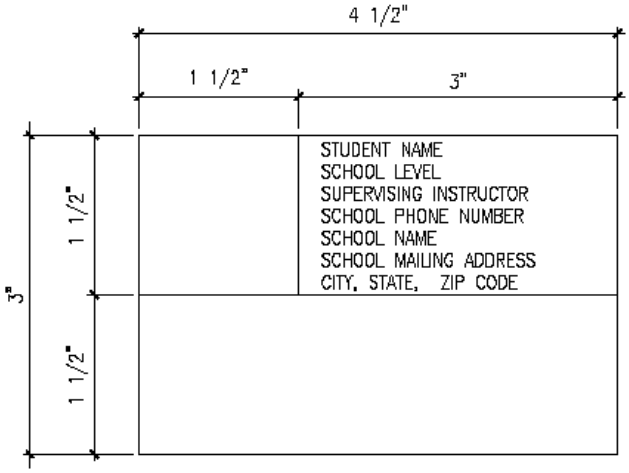
OPTIONAL DRAWINGS: If time permits, you may wish to add additional drawings (within the one sheet limit) to your presentation that further describe your design solution. These may include enlarged details to stress the importance of the enclosure or materials, interior or exterior perspectives to highlight the space, vignettes, furniture layouts, diagrams, or other miscellaneous sketches. Keep in mind that the idea is to express your design solution in the best way possible, not to fill the page with as much information that may or may not add to the understanding of the project.

Format: Each entrant's design solution shall be drawn in pencil, ink, or using CAD software and rendered if desired. The project shall be illustrated on **ONE sheet** that shall measure **22" x 34"**. No other sizes will be accepted. Multiple sheets will not be accepted.

Drawing Title: Somewhere on the sheet in a style and size of lettering of the entrant's choosing shall appear the following title:

2015 FRANK MAIER HIGH SCHOOL DESIGN COMPETITION
"A Harborage for Cultivating Change"

Student Identification: In the bottom right hand corner (1/2" borders from paper edge) provide a 4 ½" x 3" box divided and labeled as shown below. Fill in the student identification information. (This will be masked prior to judging and will remain masked until winners have been selected.)



Competition Judging: Judging will be done by a jury of members from the American Institute of Architects and winners will be selected on the following basis:

- Quality of Design and Creativity 40%
- Success in Satisfying Design Requirements 30%
- Graphic Quality (presentation, clarity, line weight, etc.) 30%

Awards and Notification: Certificates of achievement and cash prizes will be awarded to the top four entries selected, in the following manner. All projects will be reviewed and given comments describing successes of the design solution and areas for improvement.

- First Place Award $500.00
- Second Place Award $400.00
- Third Place Award $250.00
- Fourth Place Award $200.00

All participating schools will be notified of results by email by May 1, 2015, and certificates/Awards placed in the mail by May 6, 2015.

Mailing: Entries shall be **postmarked no later than Friday, April 17, 2015**. Air mail in a sturdy mailing tube to the address listed below:

2015 AIA HIGH SCHOOL DESIGN COMPETITION JURY
Attn: Richard Rearick, AIA
UMIAQ
6700 Arctic Spur Road
Anchorage, AK 99518

In addition, the supervising instructor shall airmail in a separate envelope a notice alerting the jury that entries have been mailed. **Please include a check for the amount of postage that will be required to return your entries.** Checks shall be made payable to: AIA ALASKA CHAPTER.

Tips: Three dimensional drawings are encouraged, but not required. Competitors who have done well in the past usually have included some type of three dimensional drawing, but the quality of the design solution is more heavily weighted. Strive for good line weight contrast to assist in explaining the design through drawing. The most common shortcoming of student work is faint line quality. Light lines that are hard to see may be passed over by the judges. Entrants should expect drawings to be pinned to a wall and observed from five to six feet away. Be attentive to correct spelling and lettering and dimensions at an appropriate scale. Bear in mind that the sheet layout is a presentation of the design work as well. Careful consideration should be given to the layout as a design problem that needs a solution.

Also note that consideration will be given to hand drawn presentations versus CAD produced presentations. Both styles should be considered an art form, and both can be done in a competent manner to express design intent. It is encouraged to provide forms of both computer drawings and hand drawings to show well-rounded proficiency as an artist and designer. The choice of medium for the delivery of the presentation is again another design problem that needs a solution.

Sponsor: Corporate sponsorship for this year's competition is provided by UMIAQ.

UMIAQ

DESIGN CHALLENGE

The State of Alaska has the ninth highest concentration of Homeless persons per population in the United States with a staggering rate of 26.5 persons per 10,000 people. Of the 1,785 total number of homeless persons on a single night in January 2014, nearly 65% of the sheltered homeless resided in Anchorage proper. This homeless population consists of people you may not immediately associate with homelessness; single mothers, families with children, veterans, unaccompanied youths. The amount of time a homeless family spends in a shelter varies, but can be upwards of 3 months.

Embracing the Alaskan homesteading culture and lifestyle, design a shelter where a person from the homeless population can safely rest their head, engage in a productive learning and assistive environment while regaining their independence.

The shelter will provide a living learning environment and attempt to cater to the homeless population at large. It will include dormitory bedding and semi-private family stay rooms, storage lockers, showers and laundry facilities, a large eating area, a kitchen, a resource library and many auxiliary and support service spaces. It will also serve as a garden resource center where the residents will maintain a production style "garden to table" and "garden to sale" function. The shelter will need to function as a small garden market in which it will provide a portion of its fruit and vegetable production to local farmers markets, assisting in the offset of costs while also providing hands on educational forum for residents to learn the operational aspects of running a small business.

Your job as the designer will be to take the entirety of the program spaces listed below and organize them into a functional "Live – Grow – Learn" shelter, "A Harborage for Cultivating Change"!

How can the design create overlapping activities for a vibrant and engaging atmosphere? How is day lighting used? How does the building relate to adjacent spaces or structures?

Individual areas should not deviate from the program by more than about 10%. It is intended that some of the program space will be open and overlapping to one another. Every programmed space does not have to be a separate room. The facility should be no more than two (2) stories tall, or exceed 40' in overall height. The building should have an obvious main entrance with a covered exterior area at the entrance. Other exterior doors should be provided to access outdoor spaces and as needed for egress.

You may give the "Harborage for Cultivating Change" a unique name of your choosing to express your vision of the "Live-Grow-Learn" Building.

Issues that should be kept in mind when designing the facility include:

- Site orientation
- Natural lighting
- Security – Control of entries, lighting, circulation, restroom placement, etc.
- Site development – Pedestrian access, employee access, garden location and open space.
- Use of different parts of the building at different times of the day – do certain areas need to be locked off while others are in use?
- Relationship of high-traffic, high-noise spaces to quiet spaces – Private, semi-private and public.
- Visibility of the building.
- Views from the building.
- Sustainability; such as ways to ventilate or naturally heat and cool the building, as well as other opportunities to reduce, reuse, recycle.
- Circulation inside and outside the building.
- Relationship to the surrounding context.

"Live-Grow-Learn" Building"

Outdoor/Site Amenities:

Assume street parking (no on-site parking required)
Driveway access to service entry
Bicycle racks located near main entry
Garden Space (approximately 5000 sf, not to include rooftop garden square footage allocation)
Outdoor eating/sitting area with tables and chairs (access door within close proximity to the dining room and fresh markets sales counter)

First Floor – provide the following space:

Arctic Entry	100 sf	
Reception / Lobby area	100 sf	
Restroom (Unisex)	100 sf	
Resource Library	200 sf	
Medical Offices		
1. Physician Room	100sf	
2. Patient Room	100 sf	
Dormitory		
1. 10 Male Beds	300 sf	
2. 10 Female Beds	300 sf	
Restrooms / Lockers Area (see accessibility page for plumbing fixture count)		
1. Male	250 sf	
2. Female	250 sf	
Dining Hall	400 sf	
Kitchen	200 sf	
Laundry / Janitor	200 sf	
Storage	100 sf	
Garden processing / Seedling / Greenhouse	1000 sf	
Garden Supply Storage	200 sf	
Fresh Market Sales Counter and Storage (w/outside access)	200 sf	
Mechanical Room	150 sf	
Electrical Room	75 sf	
Service Entry	100 sf	
Circulation (stairs, elevator, corridors etc.)	600 sf +/-	
Subtotal First Floor		**5,025 sf**

Second Floor – provide the following spaces:

Staff Offices		
1. Shelter Manager	150 sf	
2. Assistant Manager	100 sf	
3. Garden Manager	100 sf	
4. Counselor	100 sf	
Family Sleeping Rooms (four rooms @ 150 sf each)	600 sf	
Multipurpose Room	500 sf	
Subtotal Second Floor		**1,550 sf**

Rooftop – provide the following spaces:

Rooftop Outdoor Garden (not calculated into building area)	2500 sf	

Total Building Area **6,575 sf +/-**

The facility needs to comply with the International Building Code, 2009 Edition, and the Federal requirements for accessibility (ADA). Please see attached sheet for accessible design requirements.

This year's 50th anniversary program should offer some great opportunities to be creative and to have fun. It is in an urban setting and is adjacent to public transportation, city parks, and residential and high rise buildings. Consider the nature of the facility and the facilities residents and explore imaginative solutions that are expressive of this building typology.

For questions or comments, please send correspondence to:

RICHARD REARICK, AIA
ARCHITECTURE MANAGER | **UMIAQ**
6700 Arctic Spur Road
Anchorage, Alaska 99518
direct: 907-273-1824 | fax: 907-273-1831
email: richard.rearick@uicumiaq.com
A Member of the Ukpeagvik Iñupiat Corporation Family of Companies