

Chena Elementary

Mid-Century school architecture reflected changes in educational philosophies

In the mid-twentieth century, schools were experimenting with what served students best. Self-contained classrooms and team-teaching were both being fielded. New educational philosophies and population growth, combined with advances in architecture and engineering, created the new architecture of the Mid-Century school. This new design was no longer a one-size-fits-all solution, but a customizable building that was flexible and easily changed to meet the needs of teachers and students.

Completed in 1963, Chena Elementary was designed with key elements of Mid-Century school architecture in mind:

1. Multi-purpose rooms were a new idea. One room that could be a gymnasium, auditorium, and cafeteria reinforced the school's adaptability.
2. Conversion of rooms was simple due to the lack of load-bearing walls that could be removed without significant alterations. The school's structural flexibility was also aided by the roof design – folding plates supported by large wooden glulam beams.
3. Expandability and contractibility were made simple at Chena Elementary. The cluster plan footprint of the building enabled more pods to be added if the installation student population grew or closed off—their mechanical systems powered down—if they were no longer needed.



Small Changes, Big Results

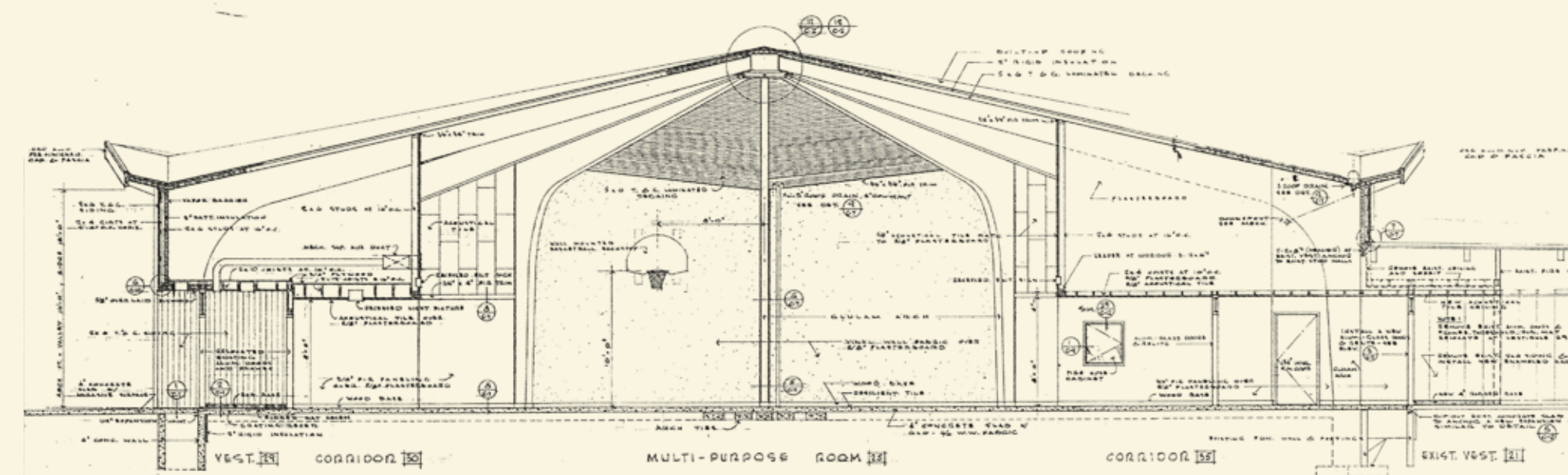
Single-Story – Throughout the period, there was a movement away from monumental buildings that were common in the 19th and early 20th century to buildings that were more welcoming for students.

Non-Rectangular – Previously schools were commonly rectangular. Rectangular footprints were cheapest to build, but more expensive to heat and cool. Less heat loss occurred from circular and octagonal structures, the footprints possessing a greater amount of space with less exterior wall. Chena Elementary combined flat panel wall segments, that were less costly to build, arranged in an octagonal shape, to increase floor space and heat efficiently.

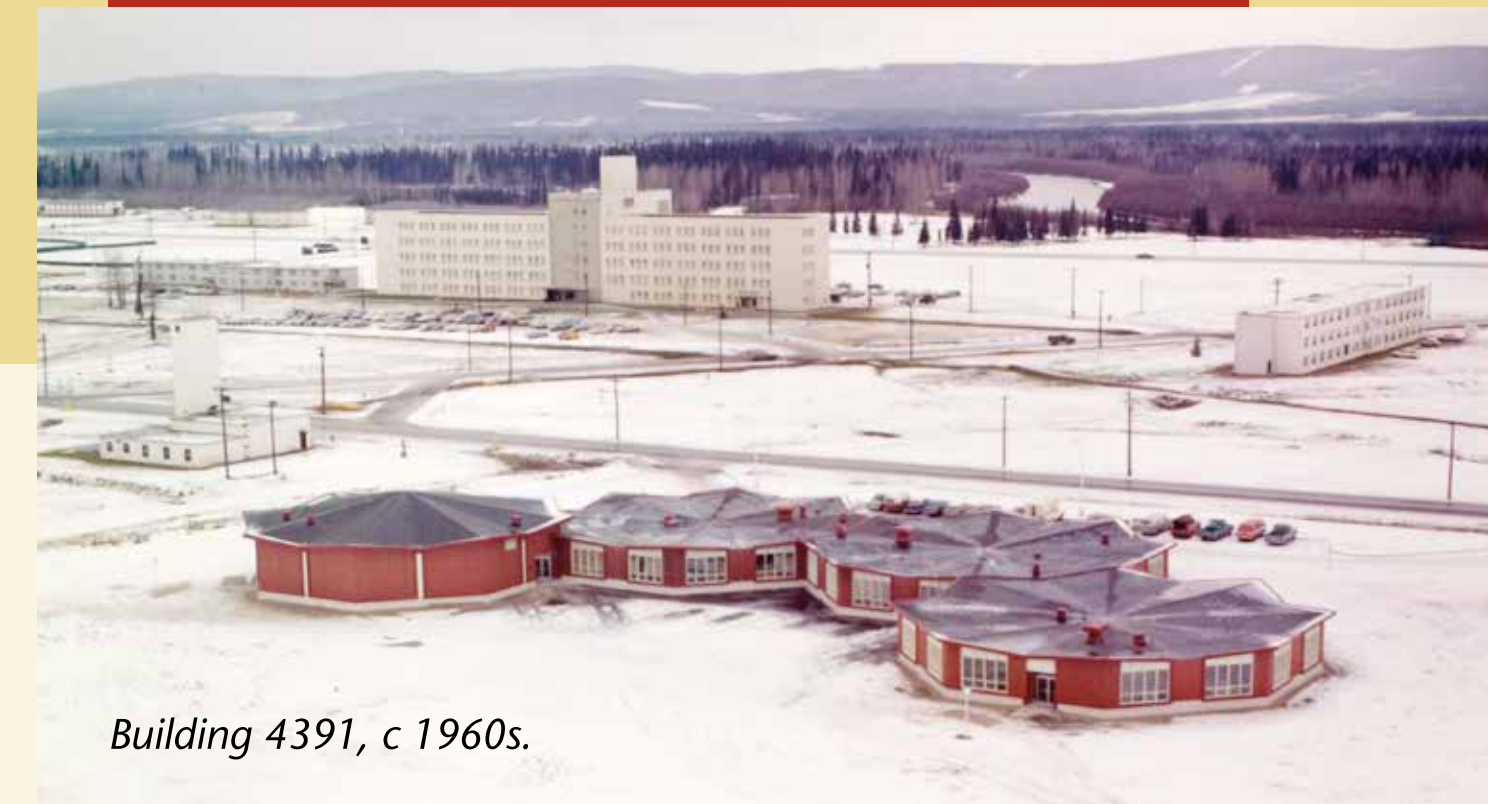
Chena Elementary was the last true Mid-Century school built in the area. After construction, population growth in the area slowed and the Air Force relocated to Eielson Air Force Base.



Top to bottom, starting left: The gymnasium roof as originally built with acoustic tile and lights, the plans for the original multi-purpose room, the building as it looks now in 2021, the interior spaces when utilized as a child development center.



Building 4391 (FAI-01789)



Building 4391, c 1960s.

During its lifetime, Building 4391 has had many names – Chena Elementary, Chinook Elementary, and Tanana Satellite School. It has served generations of children as an elementary school and a child development center. It currently houses the installation education center, continuing its educational mission and serving Fort Wainwright's adult community.

Building 4391 was determined individually eligible for the National Register of Historic Places under Criterion C: Design/Construction because it embodies the distinctive characteristics of Mid-Century school design and combined a single-story cluster plan with a flexible design that allowed for changes in the educational programming. It speaks to its period of significance, providing a creative and modern venue that supported philosophical changes in child education and was prepared to be flexible to efficiently serve the installation's fluctuating population numbers.



Building 4391, c 2020.

