Cultural Center

GANJALI KHAN COMPLEX F 2022

Design IX- Options Studio I - ARCH 4956-001

Studio Professor: Dr. Khosrow Bozorgi

INTRODUCTION

This studio encourages innovative exploration, analysis, and experimentation in developing concept/schematic proposals. Students will develop an architectural program, conduct feasibility studies for their project, and develop solutions with refined architectural planning, structural system, modern technology, and material components. Both active and passive energy systems, issues of sustainability, issues of site and context, life safety issues, and aesthetic requirements will be integral to design solutions.

SCOPE

The production coming out of this studio represents a refined synthesis of your previous experience in design plus the new challenges that lay ahead of you this semester. Thus, it is essential to bring your knowledge, skills, and experience to the problem for determining, interpreting design objectives, exploring alternatives, and evaluating these proposals to select the best concept for further development. Your project focuses on the study of complex architectural/landscape design problems in a real urban setting. In preparing the architectural concept, you are expected to take the contextual issues and environmental factors into consideration. The solution is to be not just an isolated building but one that achieves a sustainable architectural consistency and contributes to the quality of its environment while projecting its individuality and uniqueness in the design vocabulary.

OBJECTIVES

- To recognize function, context, materials, and building subsystems as significant determinants of architectural form.
- To exercise professional judgment as a part of the creative design process.

- To synthesize function, context, technology, and principles that determine architectural form.
- To apply a multi-disciplinary approach to architecture.
- The use of effective graphics and oral communication of ideas.
- The use of collaborative skills.
- The use of precedents and site consideration.
- To prepare for entry into the profession of architecture.

PROJECT THEME

The project theme is a cultural center that aims to create a public place for collecting and cultivating a wide range of artistic, creative, and productive endeavors. Approximately, 25,000 SF facility will house a mixture of programs accommodating events, exhibitions, and workshops. The center will host and encourage visitors and audiences to experience the inventive and creative expression of modern and traditional culture, science, and technology.

DESIGN FOCUS

- To introduce an architectural concept well integrated with the historical context.
- To create a new space and form combining the notion of traditional geometry and the essence of space conception in a modern building.
- The design focus should be on the notion of contained and container as the continuous and well-balanced space conception representing desert architecture.
- To integrate the interior and exterior space, into total unity.
- Respect for the meaning of a well-contained court garden conformed to the iconography of enclosure in traditional desert architecture settings.
- Incorporate the architectural element of the courtyard, which generates a central force, capable of providing basic contact with nature.
- To incorporate the use of contemporary materials, structure, and technology.
- Organic geometries and structure
- Adaptation of sustainable energy systems
- Delivery of natural light throughout the structure.

GENERIC SPACE REQUIREMENTS

The following spaces are the general requirements for the cultural center. The final program incorporated in the plans is based on the interpretation of individual studio members.

- Parking
- Lobby
- Archive
- Loading dock
- Mechanical maintenance room
- Museum gift shop & bookstore

- Educational Zone
- Children Reading area
- Multimedia & Internet resources
- Library
- Exhibition Space
- Auditorium
- Offices
- Cafeteria
- Services

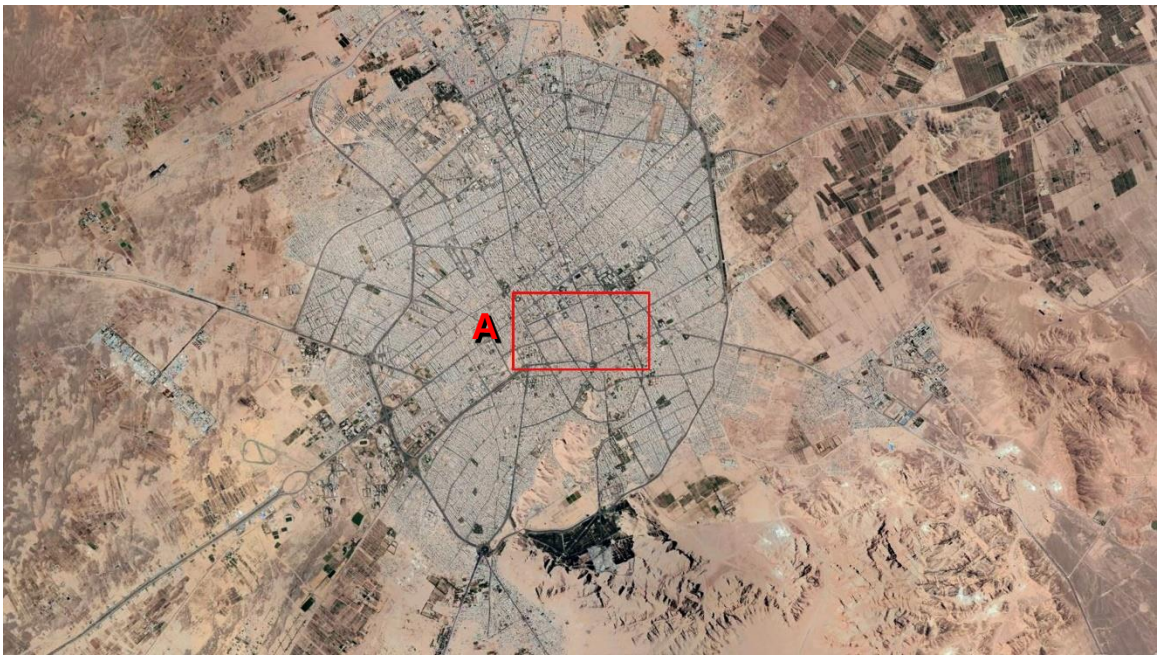
PROJECT SITE

The project site is located within the Ganjali Khan Complex, Kerman, Iran. Kerman is the remotest of the chain of cities cutting through the central plateau. In the east, the Kavir Desert separates it from what was once Baluchistan, now modern Afghanistan, and Pakistan. Historically, the city owed its modest prosperity to the Timurid and Safavid eras, when trade with India was prominent (1587-1629). The city consists of bazaars, baths, mosques, other public and private buildings, courtyards large and small, and paths. Kerman experiences one of the most extreme climates in Iran: in July, it can reach 120 degrees Fahrenheit, while the winter temperature can drop to below freezing. The climate naturally influenced the way the Ganj-Ali Khan Complex was planned and built.

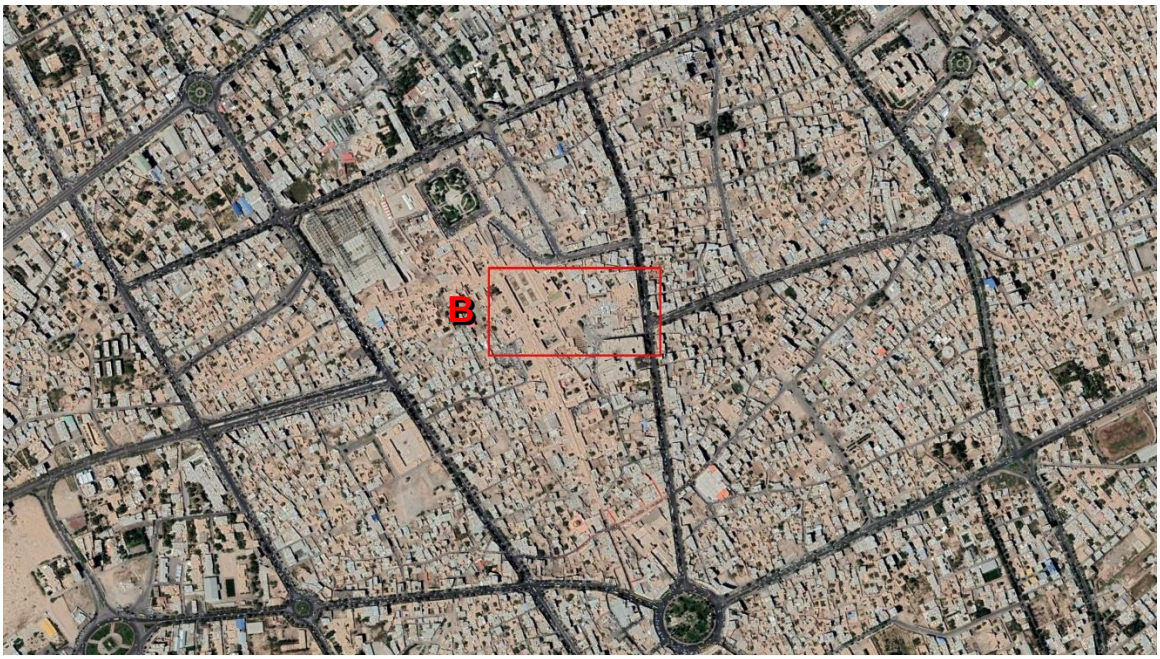
ARCHITECTURAL CHARACTERISTICS OF THE SITE

The Ganjali Khan Complex articulates a rich architectural tradition in Iranian desert architecture that has accrued a legacy of valid responses to the perennial dictates of human concerns and environmental conditions. The environmentally adaptive and sustainable principles of the Complex are the legacy of sound and balanced building designs in desert architecture. The genius of such principles is that they are based upon the human scale, the body's "golden mean" proportions, and highlighting the vernacular use of appropriate construction materials will help researchers and others understand the profound reflections of the archetypal meanings of spiritual transcendence and cosmic unity inherent in desert architecture.

In Ganjali Khan Complex the continuous architectural dialogue between indoor and outdoor spaces represents the unique character of desert cities and amplifies the brilliance of the desert cultures that evolved and flourished in an inhospitable, barren landscape. In such an environment, all buildings are designed with one major objective in mind – to counter the harsh climate in a way that could be easily sustained for protection from both summer heat and winter cold. In the organization of desert cities, this consideration has entailed respecting and learning from the several millennia of the region's previous history, especially the contributions of earlier civilizations such as Sumer, and from previous religions, such as Zoroastrianism.



A Ganjali Khan area within the City of Kerman



B Project Site within the Ganjali Khan area

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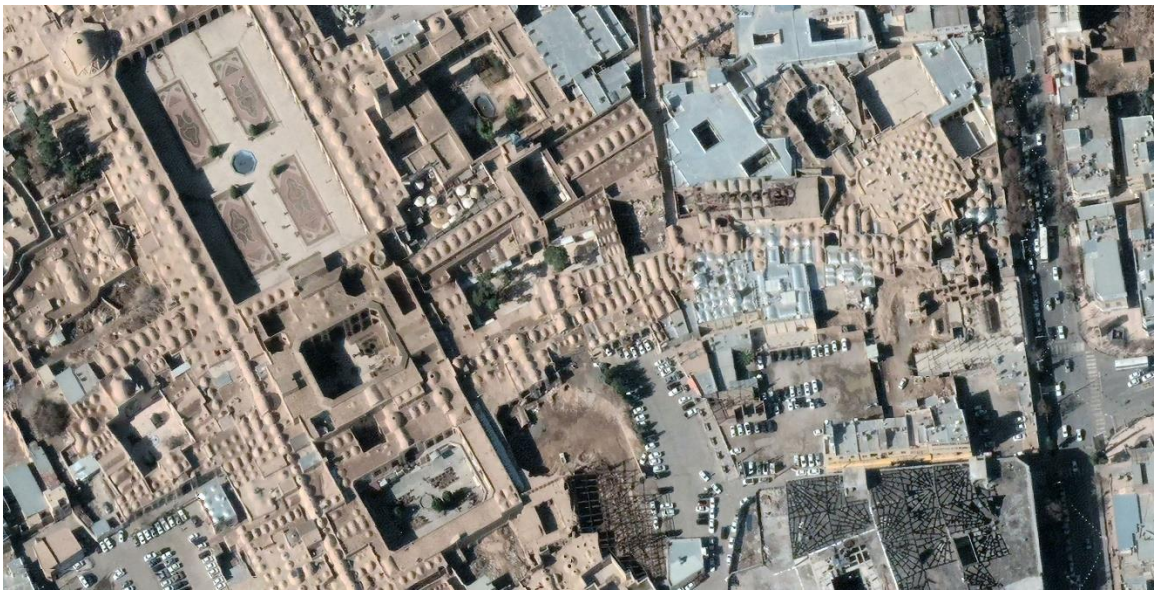

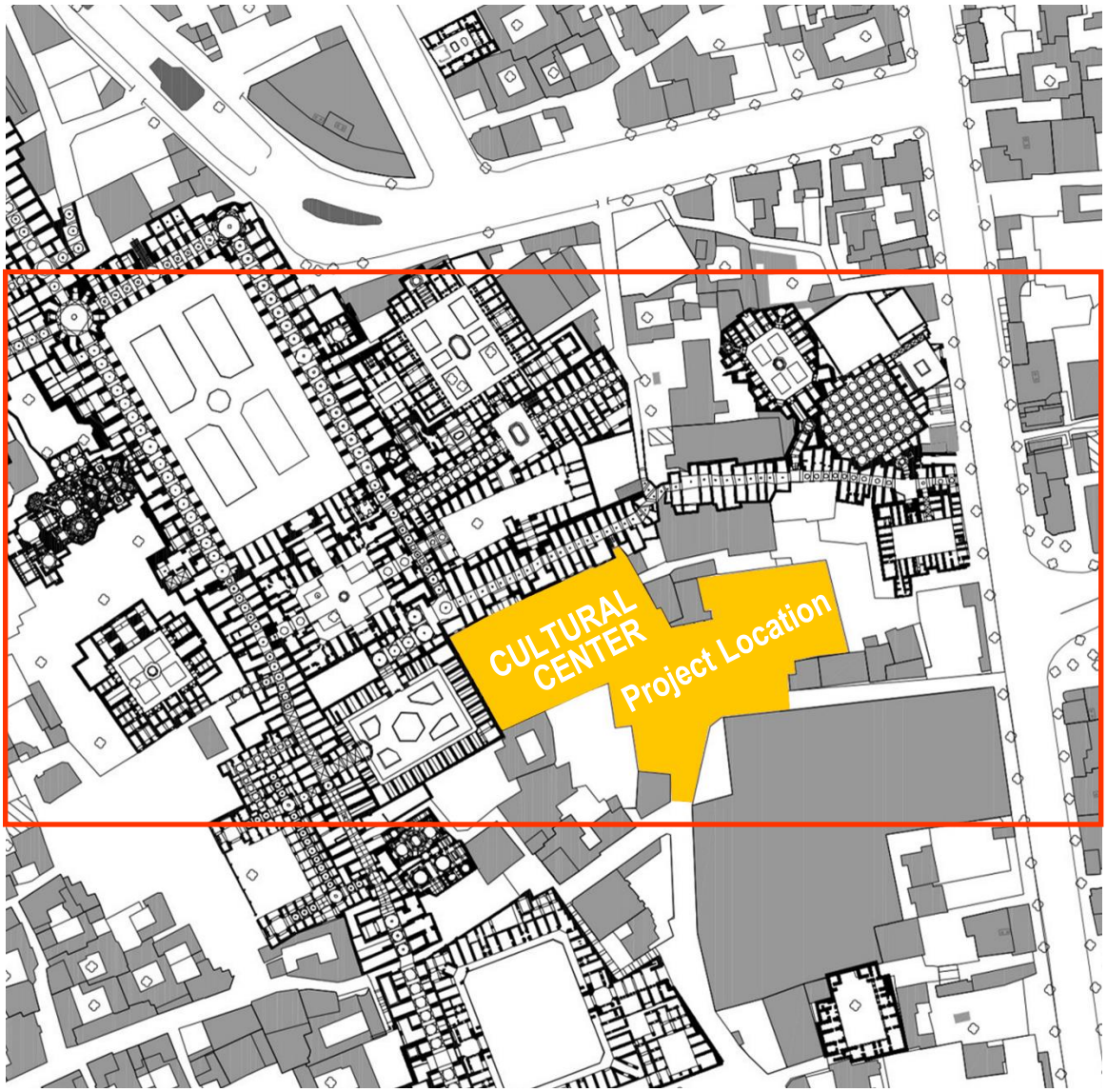

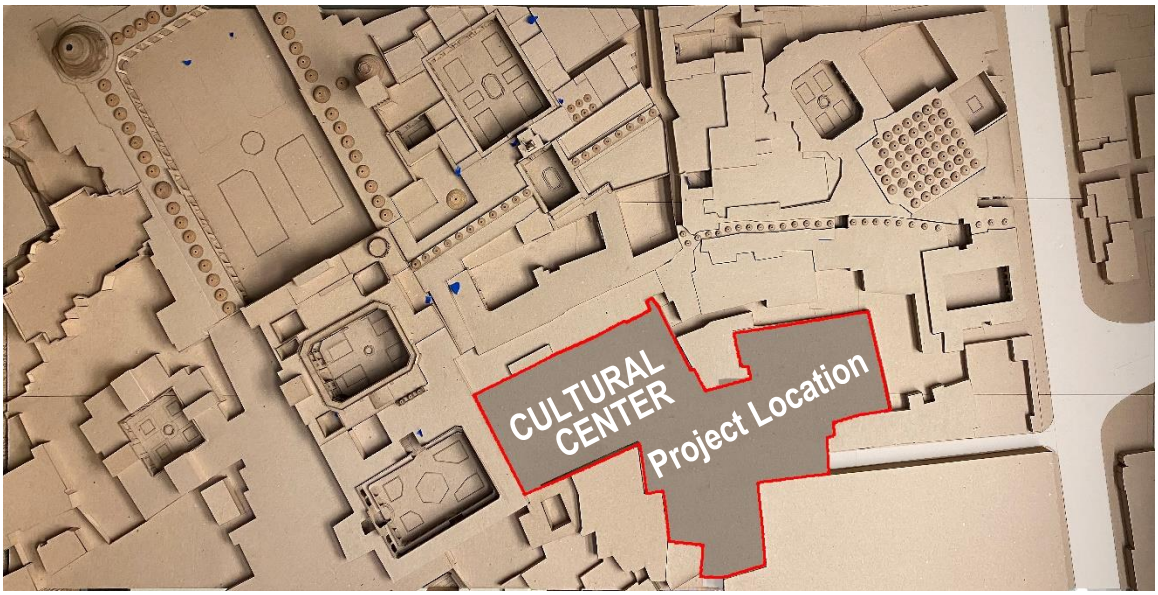

Site Model